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The Battle for Hetch Hetchy Goes to Congress

By Brian E. Gray♦

I. Introduction

Hetch Hetchy is the valley in Yosemite National Park from which San Francisco and most of the Peninsula and South Bay communities receive their water supplies. San Francisco was able to flood Hetch Hetchy Valley by persuading Congress to pass, and President Wilson to sign, the Raker Act of 1913. The passage of the Act represents the most serious invasion of a national park for a purpose other than recreation and preservation. The battle over Hetch Hetchy split the early American environmental movement. It pitted the "preservationists" led by John Muir, the founder of the Sierra Club, against the "conservationists" led by Gifford Pinchot, the creator and first chief of the United States Forest Service and the leading proponent of utilitarian conservationism.

The legislative history of the Raker Act reads like a novel, as does the public debate—which includes wonderful polemics by Muir, Pinchot, Robert Underwood Johnson (the influential publisher of *The Century* magazine), Congressman William Kent (a proponent of the project who donated a redwood forest in Marin County to the United States to honor his friend John Muir), Joseph LeConte (one of the first faculty members of the University of California), William Colby (a protégé of Muir and a prominent mining and water lawyer, Hastings class of 1897), James Phelan (San Francisco's former Mayor and California's future Senator), City Engineer Maurice M. O'Shaughnessy (after whom the dam at Hetch Hetchy would be named), and many other prominent citizens of the day. The fight to save Hetch Hetchy was the last battle of John Muir's life and he almost succeeded in his efforts to preserve the valley. President Wilson was reluctant to sign the Raker Act, but was persuaded to do so by his Secretary of the Interior,

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Franklin Lane. Before he joined the Wilson Administration, Secretary Lane had spent much of his career as San Francisco City Attorney promoting the City's water development plans.

The story of Hetch Hetchy is the subject of a book that I am writing under the working title *No Holier Temple: Hetch Hetchy and the American Environmental Movement*. The book will examine the history of San Francisco's quest for an abundant water supply, the city's focus on Hetch Hetchy Valley, the efforts of Muir and his cohorts to protect both the valley and the broader integrity of Yosemite National Park, early skirmishes before four Secretaries of the Interior, the congressional debates, construction of the Hetch Hetchy Project, San Francisco's violations of both the Raker Act and other promises that it made to secure the enactment of the statute, as well as recent proposals to raze the dam and to restore Hetch Hetchy to its original condition. As the working title suggests, the book also will identify the battle for Hetch Hetchy as a turning point in the history of the American environmental movement. The loss of the valley began the transformation from the utilitarian conservatism of Pinchot and his allies to an environmentalism that would focus increasingly on protection, preservation and restoration.

What follows is a condensed version of some of the earlier chapters of the book with a more extended treatment of the hearings on Congressman Raker's bill before the House Committee on the Public Lands. I have chosen these hearings because they highlight the debate between the preservationists and the utilitarian conservationists. They also show the difficulty that the Sierra Club and its allies encountered in persuading Congress that preservation of Hetch Hetchy Valley was justified in light of the compelling (or at least compellingly presented) demands of San Francisco for a reliable water supply.

II. A New Century

Cities grow very much like other living organisms in the animal and vegetable kingdoms. Their beginnings are insignificant and inauspicious. Their needs must be easily and readily obtainable else they could not survive infancy. They burrow into the ground for water. Their food comes from nearby sources. Then as they grow they reach out, until every corner of the globe finally contributes to their pleasures and necessities.¹

James D. Phelan, San Francisco's young and charismatic mayor at the turn of the century, envisioned a city that would be the Paris of the Pacific. In a mere fifty years since its founding, San Francisco had become the commercial, financial and cultural capital of the American West. The city had facilitated both the gold rush and early California's transition to an agricultural and commercial economy. Dry goods supplies, hardware stores, banks, refineries, railroads and other businesses that would fuel the region's development were created by men whose names remain etched in our memories—Levi Strauss, Collis Huntington, Mark Hopkins, Charles Crocker, A.P. Giannini, Claus Spreckels and Leland Stanford, among them. San Francisco's economic and cultural elite had founded both the University of California and Stanford University. The city was home to the American West's only grand opera house, where Mozart, Rossini and Verdi were performed to packed halls. The owner of the *San Francisco Chronicle*, Michael H. de Young, had recently donated his private collection to found the city's art museum. Writers and artists—including the aged Joaquin Miller, young firebrands such as Jack London and Frank Norris, San Francisco's *de facto* poet laureate George Sterling and the regal and exotic Xavier Timoteo Orozco Martinez (known to his friends simply as "Marty")—gathered regularly at the Bohemian Club. Many other influential artists—Gertrude

1. RAY W. TAYLOR, *HETCH HETCHY: THE STORY OF SAN FRANCISCO'S STRUGGLE TO PROVIDE A WATER SUPPLY FOR HER FUTURE NEEDS* 9 (Richard J. Orozco 1926).

Atherton, Kathleen Norris, Juliet Wilbor Tompkins and Isadora Duncan among them—were present in the city, although excluded from this bastion of male society.

Yet, Phelan knew that San Francisco's future was not preordained, even by its extraordinary youthful accomplishments. Surrounding the architectural marvels of the majestic Palace Hotel, the *beaux arts* City Hall, the stately Ferry Building and the splendid mansions of Nob Hill were tenements built along narrow, muddy streets, sweat shops and ghettos for the Chinese and other minority populations. As Kevin Starr has observed, "[h]ere on the empty edge of a nearly empty continental shelf should have been built the city beautiful, paradigm of the cultural order that time would bring to the Pacific Slope."² Instead, there were "ugly and huddled lands" in which both critics and supporters of the city "beheld a symbol of lost California opportunities."³ The city itself was confined to the eastern tip of the peninsula; the lands west of Twin Peaks were largely sand dunes and undeveloped pasturage for dairy farms. Oakland, Los Angeles and Seattle threatened San Francisco's status as the West Coast's principal port and center of international commerce. With an American-built canal across the isthmus of Panama under consideration in Washington, D.C., it would become increasingly important to foster San Francisco's shipping industry. And, most importantly, the city was running out of the resource that would be most essential to all of its aspirations—water.

III. Antecedents

*The direct ancestor of the Hetch Hetchy system was a donkey.*⁴

By 1860, San Francisco had exhausted its local water supplies—Lobos Creek just west of the Golden Gate, several small streams running off of Twin Peaks and various springs scattered around the city. That same year, the

Spring Valley Water Company was incorporated and quickly established itself as the water monopolist of the San Francisco Peninsula. In recognition of the limited water resources in San Francisco, the company built a temporary dam in 1862 on Pilarcitos Creek, a small stream that flows from the Coast Range into the Pacific Ocean at the town of Half Moon Bay. On July 4th of that year, Spring Valley delivered the first imported water to San Francisco through a thirty-two mile redwood flume. In 1865, Spring Valley acquired its only competitor, the San Francisco Water Works, which had built an extensive water distribution network throughout the city. Then, led by its visionary chief engineer, Hermann Schussler, the company constructed the system of peninsula reservoirs that would supply San Francisco and its neighbors to the south for the next half century: Pilarcitos Dam was completed in 1867. San Andreas Dam, built directly over the fault line, was constructed in 1868. Upper Crystal Springs reservoir and Lake Merced were created ten years later. And, in 1888, the company closed the flood gates on the cornerstone of its system—the lower Crystal Springs Dam, a 150 feet tall, concrete block dam located at the confluence of the main forks of San Mateo Creek. The dam was a marvel of nineteenth century civil engineering and symbolized the strength and seeming durability of Spring Valley's monopoly over the water resources of the San Francisco peninsula. To Mayor Phelan, however, it was inappropriate (perhaps even unseemly) for a great city to be dependent on a private company for its most vital natural resource.

Phelan's predecessors had fought with Spring Valley over water rates and San Francisco had attempted on several occasions to purchase the company. San Francisco also had looked beyond Spring Valley, however, to distant sources that offered unlimited water supplies simply for the taking. As early as 1870, the city had established a special committee to investigate alternative sources, including Lake Tahoe and Clear Lake. In

2. KEVIN STARR, *AMERICANS AND THE AMERICAN DREAM: 1850-1915* 288 (Oxford Univ. Press 1973).

3. *Id.*

4. Anita Day Hubbard, *SAN FRANCISCO BULLETIN*, Dec. 6, 1924 (describing Juan Miguel Aguirre's 1849 system of distributing water from Lobos Creek to the residents of downtown).

1875, San Francisco's Chief Engineer, T.R. Snowden, studied a variety of sources and recommended that the city acquire the Alameda Water Company, which held water rights to Calaveras Creek in the East Bay. While San Francisco negotiated with Alameda Water over the terms of the acquisition, however, Spring Valley stepped in and purchased the company for \$1 million. It then offered to sell both its peninsula sources and Calaveras water rights to the city for \$15.5 million. San Francisco counter-offered for \$11 million, which Spring Valley refused, and the parties adjourned their negotiations.

In 1878, the city retained Colonel George Mendell of the Army Corps of Engineers to conduct a more thorough investigation of potential sources of water supply. Mendell analyzed an array of sources, including the El Dorado Water and Deep Gravel Mining Company's water rights in the American River basin and the Blue Lakes Water Company's Mokelumne River holdings, as well as undeveloped sites on Clear Lake, Putah Creek, Lake Tahoe and the Yuba, Feather and San Joaquin Rivers. Mendell recommended the Blue Lakes water rights, but his proposal died when the City Attorney concluded that San Francisco's charter did not authorize it to own or operate water projects. Over the next two decades, San Francisco conducted several additional studies of possible water sources. In an 1882 report, City Engineer J.P. Dart suggested a project that would deliver water to the Bay Area from the Tuolumne River. The point of diversion for the project was about fifteen miles northeast of the town of Groveland, just above the confluence of the south fork and the main stem of the river. This map was the origin of the Hetch Hetchy Project. As the years passed, although San Francisco would continue to evaluate other sites, the Tuolumne River became the city's *beau ideal*.

IV. Pipedreams

*The Hetch Hetchy Valley has no conceivable important value except for two purposes: (1) scenery; (2) water supply.*⁵

To San Francisco city officials, and especially to the engineers under its employ, the Hetch Hetchy Valley presented a nearly perfect source of future water supply. The Tuolumne River produced an abundant supply of water that far exceeded existing appropriations. Because the present uses of the river—diversions for irrigation of crops in the Turlock and Modesto irrigation districts—were located downstream, there were no concerns about water quality. The valley's elevation of about 3500 feet would permit delivery of the water to the Bay Area by gravity, and in the process San Francisco could generate million of dollars of hydroelectric power. Moreover, although

Hetch Hetchy possessed notable scenic attractions, . . . it was also precisely these same qualities—seen through the eyes of an engineer as steep rocky walls, narrow outlet and large storage capacity—that lured San Francisco to this site for its long-sought independent water supply. Hetch Hetchy was a natural reservoir site. It was remote. It had a virtually level floor with a minimum of tree cover at its lower end. Most important, it had a narrow entrance where granite walls rose perpendicularly for several hundred feet. A more suitable storage basin could scarcely be found anywhere in the Sierra, or so the city advocates believed.⁶

There was only one problem with the proposed project—the Hetch Hetchy Valley was part of Yosemite National Park.

Today, the designation of a valley as part of a national park would pretermit any serious discussion of damming and flooding it for municipal water supply. But attitudes and aspirations were different one hundred years ago.

5. JOHN R. FREEMAN, *THE HETCH HETCHY WATER SUPPLY FOR SAN FRANCISCO* 151 (Rincon Press 1912).

6. HOLWAY R. JONES, *JOHN MUIR AND THE SIERRA CLUB: THE BATTLE FOR YOSEMITE* 87 (Sierra Club Books 1965).

First, there was no common understanding of the purposes and consequences of inclusion of an area of public land within a national park. Should all areas of the national parks be preserved in their natural state, or could some commercial activities be permitted within park boundaries? Existing practice was to allow for the use and development of some park resources. For example, hunting was authorized in Yellowstone National Park, even though it threatened the bison and elk herds for which the park had become famous. In Mount Ranier National Park, miners could stake new claims and were allowed to cut timber as needed to supply their claims. And, in Yosemite itself, sheep and cattle were driven from the San Joaquin Valley each summer to feast on the meadows and other forage within the park. Indeed, a young man named John Muir had earned his first trip to Yosemite as a shepherd following the "hoofed locusts" up the Merced River and over the divide into Tuolumne Meadows during the summer of 1869.

Second, to designate land as a park certainly was to recognize its special characteristics or history, but should the designation necessarily be permanent? What if conditions changed so that some different use of the resource was of greater value to the nation than preservation as a park? For example, in the 1890 legislation that created the Yosemite National Park, Congress directed the Secretary of the Interior to manage the lands and resources of the park pursuant to rules and regulations that will "provide for the preservation from injury of all timber, mineral deposits, natural curiosities, or wonders within said reservation and their retention in their natural condition." Yet, in 1901, Congress authorized the Secretary "to permit the use of rights of way . . . through the Yosemite, Sequoia and General Grant National Parks, California, for electrical plants, poles and lines for the generation and distribution of electrical power and for . . . water conduits and for water plants, dams and reservoirs used to promote irrigation or mining or quarrying, or the manufacturing or cutting of timber or lumber, or the supply of water for

domestic, public, or other beneficial uses." And, four years later, Congress moved the eastern boundaries of Yosemite National Park to exclude areas that private interests sought to open for mining and real estate development.

Third, a city with enough hubris to think of itself as the "Paris of the Pacific" was not to be deterred by a formality such as the inclusion of its preferred water source within the boundaries of a national park. San Francisco needed the water, Hetch Hetchy was the best and least costly source, and Mayor Phelan devised a plan to obtain the valley and its water resources for the city.

San Francisco adopted a new city charter in 1900, which expressly authorized it to acquire and to operate a municipal water works. The charter created a Board of Works and directed the new Board to recommend a future water supply for the city within one year. The Board of Works—comprised of Army Colonel George Mendell, A.B. McGuire and Chief Engineer Marsden Manson—studied and rejected a variety of sources, including Lake Tahoe, the north and middle forks of the Yuba River, the Eel and Russian rivers, the American and the Stanislaus rivers, as well as groundwater in Santa Clara County. It settled, not surprisingly, on the Tuolumne River and proposed that a single dam be constructed at the mouth of the Hetch Hetchy Valley.

Based on this recommendation, San Francisco engaged Joseph B. Lippincott, the Pacific Coast representative of the United States Geological Survey, to survey the area. Lippincott was a busy man during this period. In 1902, he joined the newly formed Reclamation Service to lead the Service's evaluation of the Owens Valley as the site of the first federal reclamation project in California. Shortly thereafter, Lippincott was retained surreptitiously by the City of Los Angeles to help it acquire land and water rights in the Owens Valley for that city's water supply. William Kahrl has written that "[p]robably no character in [the Owens Valley] narrative has appeared so villainous as J.B. Lippincott. He alone consistently broke faith with his public

trust and then lied to cover his actions."⁷ The same may be said of Lippincott's double agent role for San Francisco. Yet, Kahrl acknowledges that Lippincott's work for Los Angeles was "crucial and indispensable," because he convinced an initially reluctant William Mulholland of the need for the project and the consequent destruction of Owens Valley agriculture.⁸ Although Lippincott's involvement with the Hetch Hetchy Project was far less significant, he nonetheless played an important early role. As a reporter for the *San Francisco Examiner* later observed, "The wisdom of having Lippincott act for [San Francisco] at once becomes apparent. He had been all through the region and was familiar with it, . . . and his movements in the national park were not questioned."⁹

Lippincott confirmed that the mouth of the Hetch Hetchy Valley was an ideal location for a dam and, more importantly, determined that there were no claims to land or water rights above the proposed dam site. He advised San Francisco immediately to file for the right to appropriate water from the Tuolumne River. At the time, the simple process of posting a notice of intent to impound and divert water in the vicinity of the proposed appropriation and filing a copy of the notice with the County Recorder was sufficient. To minimize the risk of public scrutiny, Mayor Phelan filed for the water rights in his own name. He also petitioned the Secretary of the Interior for permission to construct a dam and reservoir in Hetch Hetchy Valley and for rights-of-way for pipelines, power lines and other facilities across the western part of the park and the Stanislaus National Forest.¹⁰

Secretary of the Interior Ethan A. Hitchcock denied Phelan's petition on December 22, 1903. Hitchcock chastised San Francisco for its "surreptitious" actions within Yosemite and concluded that he lacked authority to grant easements within the park for water projects. The Secretary also rejected

Phelan's argument that the Right-of-Way Act of 1901 overrode the fundamental purposes of the Yosemite Act of 1890:

Presumably the Yosemite National Park was created such by law because of the natural objects of varying degrees of scenic importance located within its boundaries, inclusive alike of its beautiful small lakes, like Eleanor and its majestic wonders, like Hetch Hetchy and Yosemite Valley. It is the aggregation of such natural scenic features that makes the Yosemite Park a wonderland which the Congress of the United States sought by law to preserve for all coming time as nearly as practicable in the condition fashioned by the hand of the Creator—a worthy object of National pride and a source of healthful pleasure and rest for the thousands of people who may annually sojourn there during the heated months.

In Hitchcock's opinion, Congress may have intended to permit the incidental use of Yosemite and the other California national parks for water and power rights-of-way. The Right-of-Way Act was not a derogation of the predominantly preservationist purposes of the parks, however, and it certainly but did not authorize the Secretary to permit the destruction of an entire valley—perhaps even an entire watershed—within the park to make way for these utilitarian uses.

Undaunted, Phelan assigned his water rights filings the following month to San Francisco. This had the advantage of removing the city's aspirations from the legal requirement that appropriators develop their water rights with diligence, because the California legislature had exempted municipalities from this obligation. Along with Secretary Hitchcock's decision, however, Mayor Phelan's action brought San Francisco's designs for Hetch Hetchy into the glare of the national spotlight.

7. WILLIAM L. KAHRL, *WATER AND POWER* 439 (Univ. of Cal. Press 1982).

8. *Id.*

9. RAY W. TAYLOR, *HETCH HETCHY: THE STORY OF SAN FRANCISCO'S STRUGGLE TO PROVIDE A WATER SUPPLY FOR HER FUTURE NEEDS* 46 (Richard J. Orozco 1926).

10. The Forest Reserves were under the jurisdiction of the Department of the Interior until 1905.

V. John Muir's National Park

[L]ong ago a few enterprising merchants utilized the Jerusalem temple as a place of business instead of a place of prayer, changing money, buying and selling cattle and sheep and doves; and earlier still, the first forest reservation, including only one tree, was likewise despoiled. Ever since the establishment of the Yosemite National Park, strife has been going on around its borders and I suppose this will go on as part of the universal battle between right and wrong, however much its boundaries may be shorn, or its wild beauty destroyed.¹¹

John Muir was an extraordinary man whose diverse interests and talents rivaled those of Thomas Jefferson before him. A child immigrant from Scotland, reared under the harshest personal conditions on a Wisconsin farm, Muir had become a locally famous inventor, an amateur botanist, a hemispheric traveler and adventurer, a world-class mountaineer, a path-breaking geologist, a nationally famous writer, a founder of the Sierra Club and, in the last decade of the nineteenth century, an influential and effective political activist. He would be remembered today for any one of these achievements. He also was a shepherd, a sawyer, a horticulturalist and a devoted husband and father. As David Quammen has observed, "John Muir was a writer who lived rather than wrote his greatest opus."¹² At the dawn of the new century, however, John Muir was to be forced into the last great battle of his life—a battle that he would lose, but which would forever change the nature of environmentalism in this country.

In 1889, Muir joined Robert Underwood Johnson, the editor of *The Century* magazine, on a trip to Yosemite Valley and the high country

of the Sierra Nevada. During this outing, the men discussed two ideas. First, they envisioned an association of mountaineers and conservationists who would join together to explore the mountains of the Pacific Coast and to advocate the preservation of the forests, geological wonders and other scenic features of the region.¹³ Second, Muir and Johnson proposed to lobby the Congress to set aside a Yosemite National Park to preserve its scenic wonders and surrounding forests. This proposal would include recession of Yosemite Valley and the Mariposa Grove from California to the United States, protection of the Merced River watershed from the valley to the high peaks and glacier, as well as inclusion of the Tuolumne River watershed from its headwaters down through Lyell Canyon, Tuolumne Meadows, the Grand Canyon of the Tuolumne, Hetch Hetchy Valley and the Poopenaut Valley to the west.

It was a grand scheme, premised on the understanding that Yosemite Valley could not be protected in isolation from the watershed that nourishes it and on the insight that the Tuolumne River system had a jewel of its own, the near twin of the wondrous but abased Yosemite. If a group of travelers "could be set down suddenly in Hetch Hetchy," Muir wrote after his first visit to the valley, "perhaps not one per cent of the number would entertain the slightest doubt of their being in Yosemite. They would find themselves among rocks, waterfalls, meadows and groves, of Yosemite size and kind, grouped in Yosemite style; and amid such a vast assemblage of sublime mountain forms, only acute observers and those most familiar with the Yosemite Valley, would be able to note special differences. The only questions would be, 'What part of the Valley is this? Where are the hotels?'"¹⁴ Inclusion of Hetch Hetchy Valley in the proposed park offered a second chance to preserve the wildness that had already been

11. John Muir, *Hetch Hetchy Valley*, NATURE WRITINGS 814 (Library of America 1997).

12. David Quammen, *Foreword* to JOHN MUIR, *THE STORY OF MY BOYHOOD AND YOUTH* at vii (Sierra Club 1988).

13. "The association's charter later declared that the organization would be known as the Sierra Club and that its members pledged to work together 'for the purpose of exploring, enjoying

and rendering accessible the mountain regions of the Pacific Coast and to enlist the support and co-operation of the people and the government in preserving the forests and other features of the Sierra Nevada Mountains." Sierra Club, *Agreement of Association* (Sierra Club 1892), in HOLWAY R. JONES, JOHN MUIR AND THE SIERRA CLUB: THE BATTLE FOR YOSEMITE 170 (Sierra Club Books 1965).

14. John Muir, *Hetch Hetchy Valley: The Lower Tuolumne Yosemite*, XI OVERLAND MONTHLY 45 (1873).

lost in the Yosemite. "It is . . . devoutly to be hoped that the Hetch Hetchy will escape such ravages of man as one sees in Yosemite. Ax and plow, hogs and horses, have long been and are still busy in Yosemite's gardens and groves. All that is accessible and destructible is being rapidly destroyed And by far the greater part of this destruction of the fineness of wilderness is of a kind that can claim no right relationship with that which necessarily follows use."¹⁵

Congress created the Yosemite National Park in 1890. The new preserve incorporated all of the areas proposed by Muir and Johnson with two notable exceptions—California had refused to cede Yosemite Valley and the Mariposa Grove back to the United States. Two years later, the "Sierra Club" envisioned by the two men was formed in San Francisco. Its members included Muir, his eldest daughter Wanda, Galen Clark and a lengthy list of prominent Bay Area academics, businessmen, lawyers, scientists and politicians such as William Alvord, John Boalt, James Bunnell, Charles Crocker, William Hammond Hall, David Starr Jordan, Charles Keeler, Joseph LeConte, Elliot McAllister, James Mills, Warren Olney, Adolph Sutro and Harold Wheeler. They elected Muir as the Club's first president.

The early Sierra Club was faithful to both of its stated goals. Muir and other members of the Club organized an annual outing to Yosemite that brought its members both closer together and closer to their common purpose of preserving the forests and other scenic features of the Sierra Nevada. As Stanford Professor William Russell Dudley wrote in 1896, "to pass from the trampled meadows of the [forest] reservation to the protected meadows of the National Park was a lesson in patriotism."¹⁶ More importantly, the Club embarked on a political campaign to include Yosemite Valley and the Mariposa Grove within the national park; to expand the perimeter of the park to embrace June Lakes, the Tioga mines and the Mammoth Lakes; and to oppose efforts to move the southeast boundary of the

park to the Sierra Nevada crest, a proposal that would remove the Devil's Postpile, Thousand Island Lake and Mounts Ritter and Banner from the park.

The Sierra Club's political maneuvers were managed principally by Muir as the philosophical leader, by Johnson as the east coast operative, and by a young mining lawyer named William Colby who was elected secretary of the Club and who had become Muir's chief assistant. Their record was mixed. In 1906, they succeeded in convincing California to cede Yosemite Valley back to the federal government, but were unable to persuade the state to relinquish the Mariposa Big Trees. Of far greater significance, however, was their almost complete failure in the fight to adjust the boundaries of the park. In 1905 legislation, Congress not only declined to include the east-side lakes and mining regions in the park, it also trimmed about 500 square miles from Yosemite's east and west sides. Although Congress added the watershed above the Grand Canyon of the Tuolumne River to the north side of the park, it eliminated Cherry Valley in the northwest corner.

The Yosemite Valley recession-boundary adjustment battles taught the young Sierra Club valuable lessons in the political realities of the time. The participants learned, for example, the necessity of having strong, consistent representation in Washington, D.C. The logistics of managing a lobbying campaign from a distance of 3000 miles were difficult and they were able to overcome this obstacle only through Johnson's contacts and his numerous personal appearances. The political neophytes also became fully aware of the power of the extractive industries to control political decisions regarding use of the public lands. The Club was challenged, and largely defeated, by a loose consortium of hardrock miners, logging companies, sheep and cattle ranchers and real estate developers who had alternative plans for the areas excluded from the 1905 park boundaries. Muir, Johnson and Colby also realized the value of making allies. They could not

15. John Muir, *Features of the Proposed Yosemite National Park*, NATURE WRITINGS 700 (Library of America 1997).

16. William Russell Dudley, *The Sierra Forest Reservation*, 1 SIERRA CLUB BULLETIN 284 (1896).

have won the recession fight without the support of the Southern Pacific Railroad, which hoped to use the attraction of Yosemite Valley as part of the *national* park to boost tourist travel to and within California. It also did not hurt that the president of the railroad, Edward Harriman, was a close friend of Muir's.

But perhaps the most important lesson of the recession-boundary fights was that the designation of an area as a component of a national park was not necessarily a permanent decision. Congress had declared its willingness to entertain requests by resource users to redefine the Yosemite National Park to reach a different accommodation of the competing interests in development and preservation. Moreover, the next battle would not be waged over the margins of the park's boundaries. As Holway Jones has observed, "While the Sierra Club was engulfed in the recession campaign, almost under the windows of the Club offices in downtown San Francisco various city officials were quietly and efficiently planning how to obtain a water supply from the Yosemite National Park."¹⁷

VI. Executive Decisions

*I never handled any proposition where the engineering problems were so simple and the political ones so complex.*¹⁸

Eugene E. Schmitz succeeded James Phelan as Mayor of San Francisco in 1902. Schmitz—who later would be forced from office for graft and political corruption—believed that the city had wasted valuable time pursuing a Hetch Hetchy pipedream that was politically impossible, and he redoubled San Francisco's efforts to acquire the Spring Valley Water Company. The Board of Supervisors voted formally to abandon the Hetch Hetchy Project on February 3, 1906. Ten weeks later, on April 18th, much of San Francisco burned to the ground following the great earthquake. In

the aftermath of the fire, Hetch Hetchy was forced back onto the city's political agenda.

In the mean time, Phelan, former City Engineers C.E. Grunsky and Marsden Manson, and business leaders such as Charles Crocker and Rudolph Spreckels kept the Hetch Hetchy proposal alive in Washington, D.C. Manson met with President Roosevelt in early 1905 to discuss the project and the President encouraged Manson to respond in writing to Secretary of the Interior Hitchcock's earlier denial of Phelan's request for rights-of-way through Yosemite and the adjacent forest reserve. Roosevelt also asked his Attorney General, M.D. Purdy, for a legal opinion on the subject. Purdy concluded that, although Hetch Hetchy Valley had been included in Yosemite National Park, the Secretary of the Interior had authority under the Right-of-Way Act of 1901 to grant easements within the national parks for water supply projects.

Based on the Attorney General's opinion, James R. Garfield, who had succeeded Hitchcock as Secretary of the Interior, invited San Francisco to present its case for the use of Hetch Hetchy and Lake Eleanor as reservoir sites. The Board of Supervisors repealed its earlier resolution that abandoned the Hetch Hetchy Project and voted to authorize the city's new mayor, Edward R. Taylor, to apply to Secretary Garfield for rights-of-way within the park to construct the project. Garfield held hearings on the request in July 1907 and, on May 11, 1908, granted the city's application. In his written decision, however, the Secretary recognized "the interest of the public in preserving the natural wonders of the park."¹⁹ Garfield therefore conditioned the permit on the city's stipulation that it would "develop the Lake Eleanor site to its full capacity before beginning development of the Hetch Hetchy site" and would not construct the Hetch Hetchy portion of the project until the needs of San Francisco "and adjacent cities which may join with it in obtaining a common water supply, may require such further development."²⁰

17. HOLWAY R. JONES, JOHN MUIR AND THE SIERRA CLUB: THE BATTLE FOR YOSEMITE 83 (Sierra Club Books 1965).

18. MAURICE M. O'SHAUGHNESSY, HETCH HETCHY: ITS ORIGIN AND HISTORY 11 (1934).

19. United States Department of the Interior, *Public Lands Decisions*, Vol. 36, at 409, 411 (1908).

20. *Id.* at 413.

On November 12, 1908, the citizens of San Francisco voted overwhelmingly to authorize the city to acquire land and additional water rights in the Tuolumne River basin and to sell \$600,000 in bonds to finance these preliminary efforts. Fourteen months later, they approved the sale of \$45 million in bonds to construct a dam at Lake Eleanor with diversion and hydroelectric facilities located downriver on the Tuolumne to the west of the park. A separate bond measure to facilitate purchase of the Spring Valley Water Company fell just short of the required two-thirds majority.

Despite these votes, San Francisco's construction of the Lake Eleanor portion of the project was stymied by two unexpected events. First, acquisition of land at the Lake Eleanor Dam site was delayed by lengthy and acrimonious negotiations between the city and the Tuolumne Water and Supply Company, which William Hammond Hall had formed as a speculative venture. Hall and several associates, including John Hays Hammond, John Coffee Hays and Jesse W. Lilienthal, formed the company in 1902 to purchase private in-holdings in the Eleanor and Cherry Valleys that San Francisco might need for the Hetch Hetchy Project. Negotiations between the city and the company lasted almost three years. Finally, in March 1910, San Francisco purchased the company's Lake Eleanor landholdings and water rights for \$400,000 and paid the company an additional \$600,000 in October 1911 for land and water rights in the Cherry Valley. Second, President Roosevelt and Secretary Garfield left office on March 4, 1909, and the delay in construction enabled the Sierra Club and other opponents of the Hetch Hetchy Project to urge the new administration to rescind the Garfield permit.

In October 1909, Secretary of the Interior Richard Ballinger asked the Directors of the Geological Survey and the Reclamation Service to investigate San Francisco's water claims and to determine whether Lake Eleanor would be sufficient to meet the city's needs. Based on the agencies' report, Ballinger

directed San Francisco on February 25, 1910, "to show why the Hetch Hetchy Valley and reservoir site should not be eliminated from [the Garfield] permit." Ballinger also asked President Taft to appoint an Advisory Board of three Army engineers to study the matter in more detail and to advise the Secretary of their conclusions. San Francisco retained James R. Freeman, a world-renowned civil engineer from Boston, to revise the plans for the Hetch Hetchy Project so that the city could demonstrate definitively that its needs justified a large dam and reservoir at Hetch Hetchy Valley.

Freeman and the engineers and hydrologists who assisted him completed their report in the spring of 1912. At 401 pages, the "Freeman Report" was an exceptionally impressive, detailed study of the revised Hetch Hetchy Project, including an assessment of local water supplies and alternative sources, with maps, photographs, simulations, schematic diagrams, hydrologic data, population and water use projections, and cost estimates. Although lengthy (and, on occasion, repetitive and turgid) the report contained both the hard data and emotional rhetoric that would fuel the subsequent debates in Congress. San Francisco's opponents would be hard pressed to respond in kind.

Freeman concluded that San Francisco's needs and the economies of scale justified immediate construction of the full Hetch Hetchy Project. To require the city to develop the Lake Eleanor source before it may erect the dam at Hetch Hetchy Valley, he wrote, "would be, under light of the present day, an economic blunder of the worst kind, wasteful of the city's funds and in gross violation of the principles of conservation of water supply."²¹

The Army Board of Engineers reviewed Freeman's work in conjunction with their own investigation of San Francisco's local water supplies, projected future needs and alternative sources. The Board largely agreed with Freeman's conclusion that Hetch Hetchy was the best source of water for San Francisco.

21. JOHN R. FREEMAN, *THE HETCH HETCHY WATER SUPPLY FOR SAN FRANCISCO* 149 (Rincon Press 1912).

Although several other sources could supply the city's projected needs, the engineers concluded that the alternatives were inferior for reasons of cost, water quality or lack of hydro-electric power.

By the time Freeman and the Army Board completed their work, Walter Fisher had become Secretary of the Interior. Fisher conducted hearings on Ballinger's order to show cause in late November 1912. On March 1, 1913, just three days before he and President Taft would leave office, Fisher issued his decision. He concluded that the issues surrounding San Francisco's use of Hetch Hetchy Valley were sufficiently complex that they should not be resolved in a revokable right-of-way permit issued by the Secretary of the Interior. Fisher noted that the Army Board based its decision in favor of Hetch Hetchy in part on estimates that it was approximately \$20 million less expensive than the alternatives that offered comparable water supplies. If the Secretary were to grant a right-of-way based on these calculations,

he would, in an important sense, be placing a monetary value upon the preservation of the Hetch Hetchy Valley in its present natural condition. He would be determining that in order to save the expenditure of a certain sum of money by the people of San Francisco the people of the whole country should consent to change the present natural condition of the Hetch Hetchy Valley. It may well be that such consent would be justified. . . . Such action, however, should not be taken by the Secretary without a clearer authorization by Congress than I am able to believe was consciously intended when the act of 1901 was passed.²²

Fisher understood that the Right-of-Way Act of 1901 authorized him to grant San Francisco's request. "[I]n view of the language of the

Yosemite reservation act of 1890," however, he concluded that "as a matter of broad public policy . . . the natural condition of so important a natural curiosity or wonder as the Hetch Hetchy Valley should not be radically changed without the express authority of Congress."²³

VII. The Raker Act

*Should the cities of Greater San Francisco be compelled to spend some ten million or twenty million dollars extra for another less desirable source of domestic water, simply in order that ten or twenty solitude lovers may have this beautiful valley mostly to themselves?*²⁴

*These temple destroyers, devotees of ravaging commercialism, seem to have a perfect contempt for Nature and, instead of lifting their eyes to the God of the mountains, lift them to the Almighty Dollar. Dam Hetch Hetchy! As well dam for water-tanks the people's cathedrals and churches, for no holier temple has ever been consecrated by the heart of man.*²⁵

Directed by Secretary Fisher to seek congressional authorization for the Hetch Hetchy Project, San Francisco enlisted the support of an unlikely ally, Representative John E. Raker, whose district included the northern portion of the San Joaquin Valley and Yosemite National Park. With the assistance of San Francisco City Attorney Percy Long, Chief City Engineer Maurice M. O'Shaughnessy, Freeman and others, Raker drafted legislation to grant San Francisco the right to construct dams and reservoirs at Hetch Hetchy Valley, Lake Eleanor and Cherry Valley. As referred to the House Committee on the Public Lands, Raker's bill also limited San Francisco's operation of the project to protect the senior water rights of the Turlock and Modesto Irrigation Districts, which were downstream appropriators of water from the Tuolumne River. And,

22. United States Department of the Interior, *Public Lands Decisions*, Vol. 41, at 561, 566 (1913).

23. *Id.* at 567.

24. JOHN R. FREEMAN, *THE HETCH HETCHY WATER SUPPLY FOR SAN FRANCISCO* 60 (Rincon Press 1912).

25. John Muir, *Hetch Hetchy Valley*, *NATURE WRITINGS* 817 (Library of America 1997).

the legislation prohibited San Francisco from selling either project water or hydroelectricity generated by the project to private parties for resale at a profit. To emphasize the urgency of his legislation, Raker inserted in the Congressional Record a message from the Spring Valley Water Company to its customers in San Francisco:

The Water Supply: Warning

The water consumption in San Francisco now exceeds the safe, dependable supply available for distribution. Until the city or the company can increase the development of sources now owned and install more aqueducts to San Francisco, extreme care must be exercised in the use of water—

Or the supply will fail. Stop all waste; stop hosing steps and sidewalks with water. Please prevent all unnecessary use of water. We earnestly ask for your cooperation in maintaining the supply.²⁶

The hearings on Congressman Raker's bill began on June 23, 1913, before the House Committee on the Public Lands, chaired by Representative Scott Ferris of Oklahoma, in Washington, D.C.²⁷ Congressman Raker was a member of the Committee, as were such other notables as William Kent of California, a close personal friend of John Muir, and a young Carl Hayden of Arizona.

San Francisco was represented by a politically savvy and articulate delegation that included former Mayor Phelan, Percy Long, John Freeman and Maurice O'Shaughnessy. Informally, the city's interests also were represented by an array of federal officials such as Franklin Lane, the former San Francisco City Attorney whom Woodrow Wilson had named Secretary of the Interior; Secretary of Agriculture David Houston; George Otis Smith, the Director of the United States Geological Survey; Frederick Newell, Director of the

Reclamation Service; Colonel John Biddle of the Army Corps of Engineers; and Gifford Pinchot.

In contrast, the Sierra Club did not send anyone from California to the hearings, and the preservationists were represented only by Edmund Whitman of Boston, who was President of the Eastern Branch of the Society for the Protection of the National Parks. Muir and Colby claimed that they did not receive adequate notice of the hearings to permit their attendance, but this protest is difficult to accept. The San Francisco newspapers reported on the political maneuverings throughout the spring and the proposed House Committee's hearings were well-publicized. In reality, Muir was at home in Martinez working on his book *Travels in Alaska*; and Colby simply miscalculated in deciding not to attend the hearings or to send another Californian in his place. Edmund Whitman, for all of his eloquence and passion, was not an adequate substitute. As an easterner, he was viewed as a carpetbagger and a poorly informed one at that.

Chairman Ferris began the proceedings by stating that the proponents of the legislation had "represented to this committee that this bill represents an emergency matter in that there is a great shortage of water in San Francisco. . . . [W]hile this bill can not afford immediate relief, it is stated that its enactment into law will relieve the city of its blight to progress incident to its insufficiency of water." He then called the first panel of witnesses, which included Secretary of the Interior Franklin K. Lane, Secretary of Agriculture David F. Houston and former Chief Forester Gifford Pinchot.

Franklin Lane

Secretary Lane began his testimony with the acknowledgment that "I am not entirely without partisanship in this matter not only because I am a citizen of San Francisco, but because some 10 or 11 years ago, when I was the city attorney . . . I was requested by the

26. 50 CONG. REC. 1828 (1913).

27. *Hetch, Hetchy Dam Site: Hearings on H.R. 6281 Before the House Comm. on the Public Lands, 63d Cong., 1st Sess. (1913).*

board of supervisors to come here and make an argument before [Secretary of the Interior Ethan Hitchcock] in the city's behalf on this very matter and since that time I have more or less interested myself in this matter as a citizen." He then presented San Francisco's case in five themes.

First, the city desperately needed additional water. Secretary Lane asserted that San Francisco's water supply "has been developed from time to time during the last 50 years and the city has outgrown it. The situation in San Francisco now is that there are many homes where sufficient water can not now be had for a bath; where it is necessary in the new and growing portions of the city to leave a spigot turned on at night in order to get sufficient water for the morning breakfast. . . . At the present time they are advertising in the papers that people must stop washing down their steps, washing off the sidewalks and watering their lawns, because the water is not to be had."

Second, Hetch Hetchy Valley was a remote part of the park and San Francisco's water project would not intrude upon, or diminish, Yosemite Valley or the other regions of the park that tourists visited. "When I speak of the Yosemite Park," Lane assured the Committee, "I do not speak of the Yosemite Valley; that . . . valley is distant from Hetch Hetchy Valley and [the proposed project] in no way touches that beautiful scenic valley." This fact was of paramount importance, Lane continued, because his principal concern was protection of the interests of the United States.

Third, while Hetch Hetchy Valley was beautiful, it was possible to improve upon the beauty that nature had provided. Although Lane acknowledged that he had never visited the valley, "[t]he place, as I have seen it pictured, is one of unusual splendor and beauty." For much of the year, however, the floor of the valley is saturated with water and camping is impossible "because of the mosquitoes there, there being such a swamp and great cliffs arise around it." The natural could be rendered both more useable and more beautiful, Lane argued, by converting the valley into a lake. "I

think that I have as much appreciation of natural beauty as anyone and as much of a desire to conserve the natural beauty of my own home State as anyone," he concluded. But "after thinking of this thing a long while," Lane had decided that "to turn that valley into a lake would add to the beauty of the whole thing rather than to detract from it in any way; but, of course, in matters of taste we all differ."

Fourth, the Secretary argued that the development of Hetch Hetchy Valley for water supply purposes was inevitable: "California needs water for other than municipal purposes, for irrigation purposes and she needs this water that comes down from these high mountains for power, because she has no coal, so that it is probably a matter of but a very few years, even if this application were denied and if this bill should fail to pass, it would only be a very few years before you would find yourselves pressed by the State of California or by private parties with large public influence behind them to set aside this identical site as a dam site for the holding back of the flood waters which run to waste If San Francisco does not get it, some one else must; it is too precious a reservoir site to remain unused."

Finally, Lane declared that the provisions of the bill that would require San Francisco to pay a fee to the Government for commercial power sales, coupled with the city's agreement to construct and maintain roads and trails into the region, were in the national interest. "[I]f this water power is developed we ought to get a large revenue and that revenue can be used to build roads and carry on other improvements that will make Hetch Hetchy available and will make that whole portion of the park accessible to hundreds of thousands of people who never will have any chance to go there if it remains as at present. Therefore it seems to me that as a park proposition alone this thing is worth while."

Secretary Lane was an outstanding opening witness for San Francisco. He concisely and persuasively articulated the city's position on the key issues. Although he had spent a good part of his career as City Attorney promoting the Hetch Hetchy proposal, Lane's

status as Secretary of the Interior allowed him to speak with a broader and more objective authority. Moreover, he anticipated and deflected the preservationists' central arguments in opposition to the project. In response to Chairman Ferris's question about the Sierra Club's concerns, Lane replied that "I have never been able to see that by converting this bed of the valley into a lake that we are outraging nature." Congressman Edward T. Taylor of Colorado complimented Lane on his flexibility and foresight: "I am glad to see the Secretary of the Interior take the position that practical use is more important than scenery or esthetic and sentimental uses."

David F. Houston

Secretary of Agriculture David Houston followed Lane. His Department's interest was in the Cherry Valley portion of the project and the rights-of-way for the diversion and transportation facilities. Houston's testimony was brief and focused on the competing interests in water supply and preservation of scenery and sentimental uses. Secretary Houston stated that he had no doubts from the case presented by San Francisco that it had "a great and growing need for this water supply. It is a prerequisite to the development of a great city." He was persuaded by the Army Board's analysis that the Hetch Hetchy project would be "the best way to secure the additional water required. It seems to me that we can not afford to stand in the way of that." Finally, Houston advised the Committee that Representative Raker's bill not only would protect the interests of the Stanislaus National Forest, but also would enhance the forest through the construction of roads and trails.

Chairman Ferris asked whether the Secretary had "considered the matter from the point of view of the people who may think it a great wrong to put this water to beneficial use because of the possible injury to the natural beauties of the valley or because of the destruction of scenic values?" Houston replied: "In the first place, if I am correctly

informed, it will add to the beauty rather than injure the appearance of the forest and the park. So that answers the question from that point of view. But I think there is a great deal of beauty in San Francisco to be conserved and I think that the thousands of people there have some claims on the Government."

Secretary Houston concluded his testimony by zeroing in on the preservationists' apparent Achilles Heel—that their quest to preserve Hetch Hetchy Valley was elitist and selfish; because it favored a few "nature lovers" over the interests of an entire city. "I think at the present time these reserves have comparatively few people visiting them," Houston emphasized. "They probably enjoy them, [but] . . . it would add to the enjoyment of a great many more people if the purposes of this bill were carried out." This conclusion, based as it was on an analysis of comparative utility, provided the perfect segue to the testimony of the next witness—the founder of the United States Forest Service and the intellectual leader of the American conservation movement.

Gifford Pinchot

Gifford Pinchot began by noting that the members of the Committee "very seldom have the opportunity of passing upon any measure . . . which has been so thoroughly thrashed out as this one. This question has been up now, I should say, more than 10 years and the reasons for and against the proposition have not only been discussed over and over again, but a great deal of the objections which could be composed have been composed . . ." He then went to the heart of the matter:

So we come now face to face with the perfectly clean question of what is the best use to which this water that flows out of the Sierras can be put. As we all know, there is no use of water that is higher than domestic use. Then, if there is, as the engineers tell us, no other source of supply that is anything like so reasonably available as this

one; if this is the best and, within reasonable limits of cost, the only means of supplying San Francisco with water, we come straight to the question of whether the advantage of leaving this valley in a state of nature is greater than the advantage of using it for the benefit of the city of San Francisco.

Pinchot framed the question within his utilitarian environmental philosophy: "Now the fundamental principle of the whole conservation policy is that of use, to take every part of the land and its resources and put it to that use in which it will best serve the most people and I think there can be no question at all but that in this case we have an instance in which all weighty considerations demand passage of the bill. . . . [I]f we had nothing else to consider than the delight of a few men and women who would yearly go into the Hetch Hetchy Valley," he declared, "then it should be left in its natural condition. But the considerations on the other side are simply overwhelming."

Pinchot differed from those who argued that the creation of a large high mountain lake would enhance the beauty of the Yosemite National Park. His conclusion in favor of the project was based on a different calculus:

Mr. Raker: "Taking the scenic beauties of the park as it now stands and the fact that the valley is sometimes swamped along in June and July, is it not a fact that if a beautiful dam is put in there, as is contemplated and as the picture is given by the engineers, with the roads contemplated around the reservoir and with other trails, it will be more beautiful than it is now and give more opportunity for the use of the park?"

Mr. Pinchot: "Whether it will be more beautiful, I doubt, but the use of the park will be enormously increased. I

think there is no doubt about that."

Mr. Raker: "In other words, . . . there will be more beauty accessible than there is now?"

Mr. Pinchot: "Much more beauty will be accessible than now."

Mr. Raker: "And by putting in roads and trails the Government, as well as the citizens of the Government, will get more pleasure out of it than at the present time?"

Mr. Pinchot: "You might say that from the standpoint of enjoyment of beauty and the greatest good to the greatest number, they will be conserved by the passage of this bill and there will be a great deal more use of the beauty of the park than there is now."

Representative Raker then asked Pinchot whether he knew John Muir and his criticism of the proposal. Pinchot replied:

Yes, sir; I know him-very well. He is an old and a very good friend of mine. I have never been able to agree with him in his attitude toward the Sierras for the reason that my point of view has never appealed to him at all. When I became Forester and denied the right to exclude sheep and cows from the Sierras, Mr. Muir thought I had made a great mistake, because I allowed the use by an acquired right of a large number of people to interfere with what would have been the utmost beauty of the forest. In this case I think he has unduly given away to beauty as against use.

Pinchot also observed that the Sierra Club itself was divided on the Hetch Hetchy question.

Pinchot's testimony concluded in a colloquy with Chairman Ferris that returned to the theme introduced by Secretary Lane—that the pressures to develop Hetch Hetchy Valley for water supply were inexorable:

Chairman Ferris: "As between the patriotic and good citizens who think that this ought to be kept sacred in its natural state and the beneficial use to these irrigation people and to the city there can be no question as to the proper thing for this committee to do?"

Mr. Pinchot: "None whatever in my mind."

Chairman Ferris: "To indulge them would be to waste the waters of that entire river and let them flow idly to the sea, would it not?"

Mr. Pinchot: "The situation in California is such that it is important to save the waste of water [sic]; it is all necessary and ultimately all will be used. The most they could hope to accomplish would be to delay the development of this water supply."

Pinchot succeeded in reinforcing arguments presented by Secretaries Lane and Houston that San Francisco needed additional water, that Hetch Hetchy Valley was the best available source, that the needs of the city and its inhabitants easily outweighed the desires of a relative handful of nature lovers, and that there was nothing in the designation of the valley as part of a national park to preclude its highest use for the greatest good. Interestingly, although Pinchot's philosophy of utilitarian conservationism would appear to leave no room for categorical statements about the special nature of the national parks, he suggested an important change to the legislation that would protect certain park resources simply because they were included within the Yosemite National Park. Pinchot urged the Committee to add a clause to the bill to provide that "no timber shall be cut in the Yosemite

National Park, except from lands to be overflowed, or such timber as may be constituted an actual obstruction upon a right of way."

"I do not believe," Pinchot explained, "that a national park should be used as a source of timber supply." Congressman Raker interrupted. "There was a special bill passed two years ago permitting the Secretary of the Interior to dispose of ripe, down, or dead timber in the Yosemite National Park. You would not object to using that sort of timber?"

Mr. Pinchot: "Not in a national park."

Mr. Raker: "Dead and dying?"

Mr. Pinchot: "A place like a national park should be protected against that. I think we can have a little timber fall down and die for the sake of having the place look like no human foot had ever been in it. I do not think that the national parks should be used as a source of timber supply."

Raker was puzzled. Downed logs could not be cut and removed from the parks, even though they could be used to supply good lumber for construction and other public purposes? Pinchot responded with a brief rhapsody to the beauty of nature that could have come from the pen of John Muir: "I will mention that among the greatest of the beauties are some of the fallen trees. I would not touch one of them." Congressman Raker inquired, "They would not want one of those great trees for building purposes?" The author of the national forest manifesto replied: "No sir. That does not apply to the national parks."

Pinchot did not explain why the inclusion of an area within the Yosemite National Park should forbid the removal of salvage timber, even if the public would profit more from the consumptive use of the timber than from its preservation in place simply to rot. Were the preservationists correct in their assertion that the principles of utilitarian conservation do not apply to the national parks? Are the resources of the parks different from the same resources

located in the national forests? Nor did Pinchot attempt to reconcile his categorical opposition to salvage timber operations with his utilitarian (and therefore flexible) position on the much more serious matter of turning a valley within a national park into a reservoir. "Why do you care so much about dead and downed trees," the preservationists might have asked, "but not for a canyon with live trees and meadows and a river flowing through it?" But they did not ask Pinchot these questions, and no one on the Committee challenged him on the apparent contradiction in his testimony.

The next group of witnesses—George Otis Smith, Henry S. Graves, who was Pinchot's successor as Chief Forester and Frederick Newell—added little to the testimony from the first panel. The Committee adjourned until the following morning, when it was to hear from the members of the Army Board of Engineers who had reviewed San Francisco's proposal, as well as from the city's own representatives.

Colonel John Biddle

Colonel Biddle outlined the Army Board's investigations and conclusions. The Board had evaluated the local sources of water available to San Francisco and agreed that they would be inadequate to supply the region's long-term demand for water. The Board estimated that the population of the Bay Area would be about 3.6 million by the year 2000 and would require approximately 130 gallons of water per capita per day or 441 million gallons per day (mgd). Irrigation uses would require another 95 mgd for a total demand of 540 mgd. The Board estimated that local sources would supply less than half of this amount and that San Francisco and its neighbors would require an additional 300-330 mgd from outside sources.

Biddle then told the Committee that the Board had visited and evaluated thirteen alternatives, which included the Eel River, Putah Creek, Clear Lake and Cache Creek, the McCloud River, the Sacramento River, the Feather River, the Yuba River, the American River, Lake Tahoe, the Mokelumne River, the Stanislaus River, the San Joaquin River and the

Tuolumne River. Of these, the Board had concluded that only five alternatives—two of which were combinations of systems—would be adequate to meet San Francisco's long-term needs. These were the McCloud River, the Sacramento River with a point of diversion at Rio Vista in the Delta, the proposed Hetch Hetchy Project on the Tuolumne River and the Cherry Valley-Lake Eleanor tributaries, a Lake Eleanor-Cherry Valley-Stanislaus-Mokelumne combination, and an American-Consumnes-Mokelumne-Stanislaus river package.

Congressman Edward Taylor, who was probably the least sympathetic member of the Committee to San Francisco, grew impatient and cut Biddle off. "If you know of any reason why we should pass this bill," he sneered, "tell us the reason." Taylor and Biddle then reduced the controversy to one simply about money—the alternatives were more expensive than the Hetch Hetchy plan:

Colonel Biddle: "The reason why you should [pass the bill] is that San Francisco has to have the water; that it is a perfectly practicable way and by far the most economical way."

Mr. Taylor: "Is it the only way?"

Colonel Biddle: "It is not the only way; no, sir. There are a number of other sources which might be used, as for instance, the McCloud River or the Sacramento River or the rivers lying to the north of the Tuolumne."

Mr. Taylor: "Would they furnish an adequate supply of good water?"

Colonel Biddle: "Practically so; yes, sir."

Mr. Taylor: "At how much more cost to the city, approximately?"

Colonel Biddle: "\$20,000,000 would be the cheapest water."

Mr. Taylor: "Did you make any investigation to determine whether the people who would use the water would be compensated by the expenditure of that additional \$20,000,000? In other

words, be benefitted to that extent or more by using these other sources?"

Colonel Biddle: "Well, that is a rather complicated question."

Taylor ended their colloquy: "I think that it goes without saying that the city needs the water and we want to give them the water. You need not make any proof of that kind. The only question is whether in the interests of the State of California, we ought to give them this source of supply or compel them to go to some other source of supply. I think this is the gist of this matter at the present time and I do not think we are going to base action on the question of scenery."

The discussion then turned to a comparison of the alternative sources. Colonel Biddle explained that the Lake Eleanor-Cherry-Stanislaus-Mokelumne proposal was inferior to the Hetch Hetchy plan on several grounds. First, it would require four dams on three separate river systems, as opposed to three dams on a single system. Second, the alternative was about \$20 million more expensive than the Hetch Hetchy proposal. Third, the alternative would generate about twenty percent less hydroelectric power than could be produced at Hetch Hetchy. Fourth, it would cost San Francisco about \$6 million to condemn downstream water rights, compared with only about \$1 million in similar costs for the Hetch Hetchy Project.

Chairman Ferris suggested that, because Lake Eleanor was in Yosemite National Park, "we would have the same protests from the nature lovers, who do not want the park interfered with." Colonel Biddle replied, "No, sir; because Lake Eleanor, while a very beautiful lake, is not in the same class as Hetch Hetchy." The Chairman then pressed Biddle on the question of the relative beauty of Hetch Hetchy Valley with and without a reservoir: "This is a place which is beautiful by reason of the high bluffs that rise on each side, but would not a beautiful lake, surrounded by a beautiful road, be just as much matter of beauty and as attractive as now?" Biddle replied: "That is, of course,

a matter of individual opinion. Personally, I prefer the valley, but some other members of the board do not."

Chairman Ferris: "Do you look on this seriously enough to think it would be wrong to make this grant, build this dam and construct that lake for a municipal water supply for San Francisco and for these irrigation people below?"

Colonel Biddle: "No, sir; largely because I think, in view of the situation in California, that all water must eventually be used, anyhow."

Biddle thus repeated, and the members of the Committee seemed to accept, the premise that the growth of California's population and the concomitant increase in the demand for water inevitably would require that Hetch Hetchy Valley be dammed for water supply purposes. The acceptance of this presumption was highly damaging to the preservationists' cause, because it pretermitted debate on the preservationists' central contention that it was inappropriate to invade a national park to provide water to San Francisco (or to any other user for that matter).

The Committee moved to the American-Consumnes-Stanislaus-Mokelumne alternative. Colonel Biddle explained that the proposal would cost approximately \$55 million, \$22 million less than the estimated cost of the Hetch Hetchy project. Included in this was the \$9 million that San Francisco would have to pay to condemn senior water rights. The alternative was inferior to the Hetch Hetchy plan, however, in that it would generate only a little more than half of the hydroelectric power expected from Hetch Hetchy. Biddle added that the Hetch Hetchy proposal offered superior water quality because of the protections afforded by its location within a national park. Congressman Kent then made an important hydrologic and astute political observation: "I do not think it has been sufficiently emphasized that this alternative site that the Colonel has been talking about also

takes water from this San Joaquin Valley." Biddle replied, "Yes; I think the objections from irrigators would be the same." Chairman Ferris honed in on the political element of the situation: "Then, if we should grant either the Tuolumne supply, Hetch Hetchy, or the first one delineated by you, we would have the same questions to consider with reference to the San Joaquin Valley that we now have?"

Colonel Biddle: "Yes, sir; but, of course, the objections would not be from the same people."

Chairman Ferris: "I understand."

Colonel Biddle: "But the same general class of protests."

Biddle explained that the McCloud River proposal, with an estimated total cost between \$58 million and \$64 million, also was less expensive than Hetch Hetchy, but the alternative would generate no hydroelectric power. Moreover, because the McCloud was a major tributary of the Sacramento River, diversion from the McCloud could reduce downstream water supply for irrigation in the Sacramento Valley. Congressman Raker interjected: "Now, if this source of supply were considered, would it not, as a matter of fact, have the effect of bringing the people of the entire Sacramento Valley and of all the northern part of the State in opposition to it and would they not be fighting and opposing us here on this very proposition?" Biddle answered that "I think they would if they were looking far enough ahead." To which Raker responded, "they are doing that now."

Finally, the Committee briefly considered the Sacramento River alternative. Although this would cost between \$20 million and \$25 million less than the Hetch Hetchy plan, Colonel Biddle derided it on the basis of inferior water quality. "The water will have to be filtered because of the flowing of the Sacramento River and its upper tributaries through a large inhabited country. As the number of communities on the river increase [sic] and the water is

more used for irrigation, the quality of water will suffer." Moreover, as upstream irrigation and municipal uses increased over time, San Francisco would have to move its point of diversion further upstream to avoid saltwater intrusion from San Francisco Bay caused by the reduction in outflow through the Delta and the Carquinez Strait. Biddle stated that, although the proposal represented a "feasible" source of supply, the likelihood of saltwater contamination at San Francisco's point of diversion rendered it an unsatisfactory alternative.

Colonel Biddle concluded his testimony by declaring: "There is no question in my mind that the Hetch Hetchy is the best water supply for San Francisco and that it is the most economical that can be obtained; it can be obtained more promptly and is better in every way."

San Francisco could not have hoped for a more favorable analysis from the Army Board. Biddle demonstrated the thoroughness of the Board's analysis of alternative sources and established that Hetch Hetchy was the best alternative from the perspectives of water supply, water rights, cost, engineering feasibility, hydroelectric power generation and water quality. Although Biddle did not answer the question whether it would be better to flood or to preserve the valley, he did confirm Secretary Lane's prediction that Hetch Hetchy would be used as a source of water supply sooner or later. This was an important contribution, because it reduced the arguments in favor of preserving the valley to a question of timing. If Hetch Hetchy would be lost in the next ten or twenty years no matter what the Committee decided in these hearings, San Francisco's demonstrated long-term needs for the water surely outweighed the short-term interests asserted by the Sierra Club. Then again, the logic of Biddle's analysis may simply have been superfluous. For, as Representative Taylor so candidly stated, the Committee was unlikely to make its decision on the basis of mere "scenery."

Colonel Harry Taylor & Colonel Spenser Cosby

The other two members of the Advisory Board agreed with the testimony of Colonel Biddle, with one embellishment. Colonel Spenser Cosby explained that he and Biddle differed "as to whether the Hetch Hetchy Valley would be more attractive with this reservoir in it than in its present condition. I believe that with the lake it would be even more beautiful than it is in its natural condition." Colonel Harry Taylor, emblematic perhaps of the entire controversy, added: "The first year I was up there I was inclined to think that it would be more beautiful as a lake, but in the second year I was inclined to think it would be more beautiful as a valley. It will be a beautiful place either way."

The brief questioning of these witnesses then returned to the theme that dominated the morning's discussions—whether it was possible to exclude any available source of water supply in light of California's projected growth. Colonel Taylor responded: "In my opinion, it is only a question of time when all of the water available in California that can be economically used will be used." Edmund Whitman, who was the preservationists' sole representative at the hearings, interjected from his seat in the audience:

Is not the same thing true as to the Merced River, which is the next river from the Yosemite Valley and is it not true, also, that the time will come when people will be demanding that the Yosemite River be converted into a reservoir?

In other words, if it is appropriate to flood Hetch Hetchy Valley now because it is inevitable that it will be dammed for water supply at some point in the future, why not build a reservoir in the Yosemite Valley, as well? Colonel Taylor replied: "I think that is stretching it a bit too far. I think that probably a demand may be made for damming that river, but I do not believe it will ever be granted. It

may be possible, also, that in the upper waters of the Merced Valley there may be rivers that will be utilized in the future that cannot be utilized to-day on account of the expense of construction."

The "upper waters of the Merced Valley" are the heart of Yosemite National Park. From his own seat in the gallery, Maurice O'Shaughnessy interrupted the questioning and quickly changed the subject. "There is a road, I understand, to Hog Ranch, within 8 miles of Hetch Hetchy. Have you any idea of what the cost of building that road was?" Colonel Cosby replied, "I do not know of any estimate that has been made," and Chairman Ferris quickly adjourned the Committee for its lunch recess. The logic of Whitman's query was one that neither O'Shaughnessy nor the members of the Committee wished to pursue.

Percy V. Long

The first witness of the afternoon session was Percy Long, City Attorney of San Francisco, who provided the Committee with a history of San Francisco's water supply, its survey of alternative sources for imported water, and its decision to pursue the Hetch Hetchy project. Among other things, Long explained that former Mayor Phelan had personally filed for the city's water rights for the Hetch Hetchy Project because in 1901 California law did not permit municipalities to acquire water rights. He also told the Committee that on July 29, 1901, Phelan posted notices of appropriation on the Tuolumne River at the mouth of Hetch Hetchy Valley and on Eleanor Creek about three-quarters of a mile below Lake Eleanor. At the time Phelan made these filings, Long asserted, neither location was within Yosemite National Park. Rather, both Lake Eleanor and Hetch Hetchy Valley were part of the Stanislaus Forest Reserve.

This portion of Long's testimony was legally inaccurate and probably untruthful. First, the California Civil Code of 1872 had expressly authorized cities to appropriate water and, as an experienced municipal government lawyer, Long must have known this. Second, Hetch

Hetchy Valley and the Lake Eleanor watershed had been part of Yosemite National Park since 1890 when the park was created. Long's statements to the contrary were palpably false and it is shocking that no one on the Committee or in the audience corrected him.

The motives behind Long's prevarications may only be surmised. His mischaracterization of Phelan's actions probably was intended simply to hide the fact that Phelan filed for water rights in his own name to avoid scrutiny by the Department of the Interior, the Sierra Club and other interested parties. Long's misstatements about the boundaries of Yosemite National Park are more difficult to explain. San Francisco's possession of water rights in the Tuolumne River watershed was the principal difference between the Hetch Hetchy Project and several of the alternatives considered by the Army Board. If San Francisco were forced to pursue one of these other projects, the cost of acquiring the necessary water rights would be approximately \$6 million. Perhaps Long and the other San Francisco strategists did not want the members of the Committee to think that the price advantages of the Hetch Hetchy Project were gained illegitimately. The opponents of the project might have argued, for example, that San Francisco should have known that it would not be permitted to develop its water rights within a national park and therefore the city's asserted reliance on its Tuolumne River and Lake Eleanor water rights was ill-founded. But neither Whitman nor the Committee members noticed Long's sleight of hand. As a consequence, San Francisco was never required to justify its asserted reliance on water rights that, because they were acquired within a national park, were of uncertain value.

At the conclusion of Long's testimony, the Committee adjourned until ten o'clock the following morning.

Maurice M. O'Shaughnessy

By the time of the Committee hearings, Maurice O'Shaughnessy had served as Chief Engineer of San Francisco for ten months, suc-

ceeding an ailing Marsden Manson on September 1, 1912. O'Shaughnessy was already an engineer of some repute, having designed and overseen construction of several important municipal projects, including the Stockton Street Tunnel, the extension of Geary Street to the Pacific Ocean, and the Sutro Tunnel, which opened the western part of San Francisco—Forest Hills, St. Francis Wood and the Sunset District—to residential development. His remarks would focus on two of the three important issues before the Committee—the benefits of Hetch Hetchy over the alternative sources and whether San Francisco's diversions from the Tuolumne River would jeopardize the development of irrigated agriculture in the San Joaquin Valley. O'Shaughnessy's testimony was a prelude to the most contentious day of the House Committee's deliberations.

O'Shaughnessy began by explaining why it was important to construct a large dam and reservoir at Hetch Hetchy Valley, along with smaller facilities at Lake Eleanor and Cherry Valley. The first reason was hydrologic. "In California," he stated, "we are very often subject to a succession of two and sometimes three dry years. For a municipal supply this involves having a reservoir and storage capacity to tide over such a dry period. . . . In San Francisco for the past two years there has been a shortage of over 50 percent of rainfall and this has resulted, at the present time, in leaving our reservoirs in a very depleted condition, so that the public is very much alarmed at what the outcome is going to be." The second reason was the result of the priority of the city's water rights. Although San Francisco's water rights dated back to 1901, they were junior to the rights of two downstream appropriators, the Turlock and Modesto irrigation districts. This meant that San Francisco could impound water only when the flow of the Tuolumne River exceeded the districts' senior water rights. Because this would occur during the spring when snowmelt and runoff were high and the city's demands would exist year-round, there had to be some way to store large quantities of water in the Sierra Nevada for later release and

export to the Bay Area. Small reservoirs at Eleanor and Cherry would be inadequate to this task.

He then explained why San Francisco had decided to seek legislation to authorize construction of the Hetch Hetchy project, rather than simply to ask Secretary Lane to revise the Garfield permit:

Mr. O'Shaughnessy: "[T]he reason why we desired grants by Congress of these rights for a domestic water supply is that the great city of San Francisco and the group of cities to be associated with it, such as those that surround the Bay of San Francisco, do not desire to be constantly subjected to capricious actions on the part of departments here at Washington. Every two years there is a change of the Secretary or a change of the policy of the Interior Department—

Representative Taylor (interposing): "Every two weeks, sometimes."

Mr. O'Shaughnessy (continuing): "And a big city like San Francisco and the cities around the bay, Oakland, Alameda and Berkeley, the population of which at the present time is 800,000 people, want to be secure in their rights so that they may go ahead with a definite plan and a definite policy and prepare for the future. Dam structures of this kind, large engineering dams and structures, require that the most careful thought and consideration be given not only to design but program of construction so that no mistakes may be made and if we are constantly moving from one part of this watershed to the other with the changing views of department heads our plans will be most indeterminate and we can reach nowhere."

Representative Raker: "It also becomes a vital question in the issuance and sale of bonds to have permanent rights."

Mr. O'Shaughnessy: "It seriously damages the credit of the city to be building large works on a revokable permit."

O'Shaughnessy finished his prepared remarks a brief comment on the preservationists' objections: "I would like to say one thing in conclusion in regard to the scenic features. I may be accused of being a nature lover, because I have sincerely practiced it all my life. I have lived in the trees all my life and it is only the last year, since I became a municipal officer, that I have lived in a city. I have planted a lot of trees and a lot of forests and I think I can realize what the result of this lake is going to be in Hetch Hetchy Valley. I have just completed a similar reservoir in San Diego County, in the southern part of California, near the Mexican line and what was ordinary, very tame and uninteresting scenery before the construction of the dam is now one of the picturesque lakes which all tourists and visitors go out of their way to see. I am satisfied in my own mind that the construction of this dam will beautify this scenery to a degree even more than anyone can estimate."

As with their queries of previous witnesses, the members of the Committee were less interested in aesthetics than the questions of alternatives and the effects of San Francisco's diversions on San Joaquin Valley agriculture. Several members asked about the McCloud and Sacramento sources. O'Shaughnessy dismissed the latter for reasons of poor water quality and the cost of pumping. "You might as well with equal reason ask New York City to go to the Hudson River, 40 miles above New York and take the Hudson River water and filter it. But neither New York City nor any other big city has ever seen fit to take an objectionable character of water when it can get something better." O'Shaughnessy's reactions were accurate for their day. All of the nation's large cities that could avail themselves of water supplied from protected mountainous sources had secured that option. As Freeman discussed in his report, not only had Boston and New York obtained water from distant sources, but the

newer cities of the West Coast—Seattle, Portland and most recently Los Angeles—had done so, as well.

O'Shaughnessy's response to the McCloud River suggestion, however, was more revealing of San Francisco's underlying strategy to present the Hetch Hetchy proposal both as a comparative financial bargain and as something of a *fait accompli*. Chairman Ferris asked whether the McCloud could supply 400 mgd to San Francisco without interfering with prior irrigation rights in the Sacramento River basin. O'Shaughnessy replied: "Yes, sir; but the expense would be entirely beyond the capacity of the city and the distance from the city, is also very great. You might as well talk about taking water from Lake Erie or Lake Superior for a water supply to the city of New York."

Chairman Ferris: "How far is McCloud from the city of San Francisco?"

Mr. O'Shaughnessy: "By the line of the conduits the distance will be considerably over 250 miles."

Chairman Ferris: "How far do you have to go in order to reach Hetch Hetchy?"

Mr. O'Shaughnessy: "One hundred and sixty miles."

Chairman Ferris: "Your idea is that the distance will make it prohibitive?"

Mr. O'Shaughnessy: "The distance will make it prohibitive and also we will have to begin our policy anew. We adopted the policy, after exhaustive engineering studies, some eight years ago of acquiring properties in the Tuolumne watershed and we have spent nearly \$1,700,000 in acquiring our rights in this country, all of which would be confiscated if we abandoned this source and we would have to start anew and acquire rights in this remote region—and it is very remote—and that would be so expensive that it would not be within the capacity of the city to utilize it."

Ferris then read a telegram that he had received that week: "God gave to San Francisco the Pacific Ocean; the rest of the world to the Standard Oil Co., but the waters of the Tuolumne River to Stanislaus County." After the laughter subsided, he explained: "What I was really trying to get at, in all seriousness, was whether San Francisco was seeking to take from the San Joaquin Valley its only source of water supply for irrigation purposes. I am glad personally to know that [the farmers] have other sources of supply, because while the highest use to which water can be put is domestic use, still we do not wish to divest people of the chance of raising bread and meat for the rest of us." Ferris based his assurance on O'Shaughnessy's assertion that there were twenty other rivers in the San Joaquin Valley from which irrigation water could be obtained. Congressman Church challenged this accounting: "Did you not overestimate the number of rivers that flow into the San Joaquin Valley?"

Mr. O'Shaughnessy: "I believe I underestimated them."

Representative Church: "You said there were 20. Will you name them?"

Mr. O'Shaughnessy: "I will take out a map of California and give you the names of those rivers. The Stanislaus, the Tuolumne, the Merced, the Kings River, the Kawaeh River—"

Representative Church (interposing): "Is that a river?"

Mr. O'Shaughnessy: "Oh, yes."

Representative Church: "I used to swim in it when I was a boy, and I never thought it was a river."

Mr. O'Shaughnessy: "And I drank water out of it 27 years ago—the king's river."

Representative Church: "You mentioned that already."

With prompting from other members of the Committee and the audience, O'Shaughnessy could name only twelve San Joaquin Valley

rivers, two of which Congressman Church characterized as "little streams that dry up before they reach the plains." But this was apparently enough to satisfy the Committee that there would remain, even after the export of Hetch Hetchy water to the Bay Area, enough water to permit agriculture to thrive in the San Joaquin Valley. Indeed, William Dennett, who was present to represent the Waterford Irrigation District and Stanislaus County, moved from his seat in the gallery to submit a report prepared by the California Conservation Commission that showed eighteen rivers and streams that on average discharged more than 12 million acre feet per year into the San Joaquin River system. Representative Church, however, was unmoved: "In campaign times I have claimed that seven rivers flowed into my district and if there were any more there I am sure I certainly would have mentioned them."

Congressman Raker changed the subject to ask O'Shaughnessy about San Francisco's contributions to the national park and the surrounding communities for the privileges it was seeking from Congress. Would the city, Raker inquired, be willing to make permanent the Hetch Hetchy railroad—which San Francisco would build to haul equipment and materials to the construction site—to benefit the inhabitants of the area between the park and the Town of Groveland? O'Shaughnessy replied that the present plan was to remove the tracks after construction and have "the railroad bed converted into a first-class wagon road." San Francisco would not object, however, if the Government or the residents of the area purchased and operated the railroad.

O'Shaughnessy also informed the Committee that it would "cost a fortune"—about \$500,000—to build a road on the south side of Hetch Hetchy Reservoir. Congressman Raker was surprised. "[T]his is the first time that I have understood that there would be any variation from the Freeman report on that question," he replied. "The people were absolutely satisfied as to the roads; and, now, if there is any question as to these roads not going clear around it, I shall not permit myself to be placed in that position." Perhaps sensing that San

Francisco was losing its chief legislative patron, O'Shaughnessy backtracked. "But, as I say, the building [of the road] is optional with the Government; and if the Government should require us to make the road all the way on the north side of the lake [as a substitute for no south shore road], that is provided for in the bill." This allayed Congressman Raker's concerns about the city's good faith. "Now, suppose the south side was left out," he asked, "would the rest of the country be as accessible by continuing the road clear through on to the north side?"

Mr. O'Shaughnessy: "Just as accessible."

Representative Raker: "And you think there can be no question raised?"

Mr. O'Shaughnessy: "No, sir; I do not believe that a single question can be raised."

This was an important issue because San Francisco's principal response to the preservationists was that the loss of Hetch Hetchy Valley would be offset by dramatically increased public access to a beautiful high mountain lake and the surrounding back country. In utilitarian terms, more scenery would be more readily available to more people. O'Shaughnessy's suggestion that San Francisco might renege on this pledge revealed the city's environmental concerns as more pretense than stewardship. San Francisco would honor its reciprocal commitments to improve the park only to the extent required to secure Congress' all-important largesse.

James D. Phelan

James Phelan used his brief appearance before the Committee to launch the strongest attack on the preservationists yet presented in the hearings. "As Californians," he began,

we rather resent gentlemen from different parts of the country outside of California telling us that we are invading the beautiful natural resources of

the State or in any way marring or detracting from them. We have a greater pride than they in the beauties of California, in the valleys, in the big trees, in the rivers and in the high mountains. . . .

All of this is of tremendous pride and even for a water supply we would not injure the great resources which have made our State the playground of the world. By constructing this dam at this very narrow gorge in the Hetch Hetchy Valley, about 700 feet across, we create, not a reservoir, but a lake, because Mr. Freeman . . . has shown that by planting trees or vines over the dam, the idea of a dam, the appearance of a dam, is entirely lost; so, coming upon it, it will look like an emerald gem in the mountains; and one of the few things in which California is deficient, especially in the Sierras, is lakes and in this way we will contribute, in a large measure, to the scenic grandeur and beauty of California.

The former mayor then engaged in a brief exchange of bad puns with Congressman Graham:

Mr. Phelan: "I suppose nature lovers, suspecting a dam there not made by the Creator, will think it of no value, in their estimation, but I submit, man can imitate the Creator—a worthy exemplar."

Representative Graham: "In that they are mistaken by a dam site?"

Mr. Phelan: "They are mistaken by a dam site and after it is constructed, as somebody said, not wishing to be outdone in profanity, 'It will be the damdest finest sight you ever saw.'"

Phelan concluded with a flourish of rhetoric, recalling "the story of John Hay's Little Breeches, which describes the old fellow, who, believing in nothing that was religious or good and having been told, after his child recovered, that he had wandered away in the woods and must have been restored by the angels, said:

To restore the life of a little child and to bring him back to his own,

Is a darn sight better business than loafing 'round the throne.

"To provide for the little children, men and women of the 800,000 population who swarm the shores of San Francisco Bay is a matter of much greater importance," Phelan declared, "than encouraging the few who, in solitary loneliness, will sit on the peak of the Sierras loafing around the throne of the God of nature and singing His praise. A benign father loves his children above all things. There is no comparison between the highest use of water—domestic supply—and the mere scenic value of the mountains. When you decide that affirmatively, as you must and then, on top of that, that we are not detracting from the scenic value of the mountains, but enhancing it, I think there is nothing left to be said. That is all."

Phelan's testimony was curious to say the least. There was no mention in the Freeman Report of growing trees or vines on the dam. Nor was there a shortage of lakes in the Sierra Nevada. And his attack on the motives of Muir and his cohorts, while perhaps heartfelt, was ungenerous and unnecessary. Although he was a highly respected politician and was as responsible as anyone for bringing the Hetch Hetchy project to the verge of reality, Phelan came across as something of a yahoo. But Phelan was the *former* mayor of San Francisco. Through his testimony, the city's delegates may have tried both to present the prettiest picture of Hetch Hetchy Valley as a reservoir and most forcefully to mock the preservationists, while distancing the "official" San Francisco position from Phelan's harsh and misleading rhetoric.

Following Phelan's testimony, the Committee recessed until mid-afternoon when it would hear from the sole representative of the preservationists.

Edmund A. Whitman

Edmund Whitman's afternoon before the Committee got off to a rough start. "I might say," he declared, "that I represent the public of the United States except for the fact that I was reminded, by seeing Mr. Brandeis, of Boston, in the hall yesterday, that he came before the Committee on Ways and Means in a previous Congress and professed to represent the public of the United States on the matter of a reduction of tariff duties and, as he told me, he was not only laughed, but put out of the room." Despite this warning, Whitman continued: "I trust, however, that in view of the fact that I was born on the plains of Kansas, was raised south of the Mason and Dixon line and now live in Massachusetts, that my sympathies may be regarded as cosmopolitan enough to say that I do represent the public of the United States." The committee reports do not note that any laughter accompanied this declaration, nor was Whitman removed from the hearing room.

He then chastised City Attorney Long for suggesting nefarious motives among those who were wiring the committee to request a delay in the hearings. "Mr. Long ought to know, from the time he has lived in San Francisco, that these telegrams emanate from a body of gentlemen who have fought this project from the highest motives, the leader of them being Mr. John Muir, who is one of the leading scientists of the United States and whose name is honored in every scientific circle in which he goes. Through his action and that of his associates . . . there has been a widespread public sentiment created throughout the entire United States by his communications and intelligent communications to intelligent people."

Whitman explained the absence of other representatives of the preservationists, as well as the requests to delay the hearings. He

informed the members of the Committee that he wrote to their clerk on April 22, 1913, to ask whether the Committee would be considering Congressman Raker's bill during the current session. The clerk replied on April 24th that it was unlikely that the Congress would take up any legislation except for tariff and currency reform. Whitman did not learn until the week before the hearings that they might take place. He then wrote to the clerk, who told him that Chairman Ferris was out of town and that "from the best information he could get there would be no action by the committee at this session." On Saturday June 19th, Whitman received a telegram from the Sierra Club, notifying him that the hearings would begin on Monday June 21st. He then wired Ferris for confirmation, who telegraphed back that the hearings would begin on Wednesday the 23rd. This telegram arrived along with a letter from the clerk, which stated that there would be no hearings. "Now, gentlemen," he continued, "if you in this committee think that those interested throughout the United States have had sufficient notice of this meeting, I have nothing further to say, but I think when you come to take that up with your interested constituents at home there may be some difference of opinion."

This provoked a bitter response from members of the Committee. Chairman Ferris complained: "Just let me interrupt the proceedings right there to ask whether you think it is the duty of the committee to inform all of the 90,000,000 people by actual telegraphy who might have a general interest in this matter, personally and actually, of this hearing?" Whitman replied, "I should not, but at least those who have requested to have notice." The Chairman abjured, "Well, everyone who has requested notice has had notice." Whitman shot back: "Only 24 hours notice. I was one who requested to have notice on April 22." Congressman Kent was incredulous: "I wish to say that I resent the idea of this witness talking about our constituents or our responsibilities to them. Those are matters for us to determine, I shall not tolerate the threat of what my constituents may say or do to me."

Having alienated most of the congressmen present, Whitman then set out to change the minds, if not the hearts, of the Committee members who had declared themselves fully in support of San Francisco's plans. He began by declaring that:

our objection, as representing the public, is this—and it is a broad objection—that when a territory has been devoted to a public playground by the Congress of the United States for the benefit of all the people, particularly a territory which has so many wonders of nature in it as has this Yosemite National Park, no part of it should be taken away from all the people to whom it belongs without good reason. That is as far as we go. And it is for the city of San Francisco to bear the burden of proof and show you gentlemen that they have an overwhelming reason, such as an overwhelming necessity, as justifies you in taking away for their benefit a part of the national park; the burden is on them.

Whitman conceded that San Francisco needed an additional water supply. "I have no doubt," he stated, "that the situation which is described in San Francisco rather understates than overstates the situation." The cause, however, was not a shortage of local water sources, but the city's delay in acquiring the Spring Valley Water Company. Until the uncertain relationship between the two was resolved, Spring Valley would not invest in new water works. "Under those circumstances," Whitman argued, "no business man ever spends a dollar in the extension of facilities when he does not know if he is going to get it back or not. And whole districts in San Francisco have been left without facilities, because the Spring Valley Company could not agree with the city about spending money." The solution—better in the short-run for San Francisco and for the general public in the long-term—was for San Francisco and Spring Valley to build the Calaveras Reservoir in

the East Bay, which would more than double the city's water supply to 97 mgd. This would comfortably supply San Francisco's current demand of 90 mgd. In contrast, the Hetch Hetchy project would take at least four years to complete.

This was a flawed strategy. Whitman's supply and demand equation ignored both future growth in the Bay Area and the fact that San Francisco was proposing to share the Hetch Hetchy supplies with the other cities in the region and with the farmers in the San Joaquin Valley. Whitman ignored the alternative of challenging the need for San Francisco to invade a national park when water was available from other rivers in the Sierra Nevada, a strategy that would have played into the reservations expressed by Representatives Church and Taylor during the previous sessions of the hearings.

Whitman then injected into the debate the argument that Congress did not have authority under the Constitution to establish conditions on San Francisco's use of the waters of the Tuolumne River. "The United States has nothing to do with the waters of California," he argued. "The waters of the Tuolumne River belong to the citizens of the State of California; and if the city of San Francisco had been able to buy and get in private ownership the dam site and all the land which it was necessary to overflow and then proposed to return the water to the river after it was stored, they would not have come to you; you would have had no jurisdiction whatsoever."

Several members of the Committee responded with questions about the navigability of the Tuolumne for federal regulatory purposes. Whitman replied:

Let me describe this river. It rises up amongst the highest crests of the Sierras, flows for 5 or 6 miles through a big meadow and then in 20 miles falls 3,000 feet. It has some of the most wonderful falls, in beauty and volume, that there are in the mountains. Then it flows for 2 miles through Hetch Hetchy Valley and then there is a rushing mountain stream for 20 miles more.

And on this basis, what are you being asked to do? You are being asked to sit as the Legislature of California, to legislate over purely State matters with which the United States has little or nothing to do. For instance, take the proposition to impose charges on the power produced. What is the basis of that? Power house No. 1 is outside of even the national forest, . . . and I understand it is in private ownership. What right have you to impose charges on power created on private land? . . . What is your authority here?

Congressman William La Follette of Washington spoke for the first time in the hearings: "Is it not a simple fact," he asked, "that in order to create a storage dam to get any of this power at all they have got to use a dam site belonging to the United States Government, under the ruling of the Secretary of War that the Government has a right to control any power generated by that dam?" Congressman Kent was more blunt: "It seems to me that conditions would always accompany that privilege. If the city of San Francisco asked for a privilege from the Government, the Federal Government has the right to exact conditions. It is not a question of Federal or State rights."

Whitman's constitutional challenge to the water rights and power conditions of Congressman Raker's bill was odd, because the preservationists had no direct interest in defining the proper boundaries between federal and state authority over water rights and hydroelectric power. Whitman's strategy may have been to raise enough questions about Congress' constitutional authority that the delicate, and only recently forged, compromise between San Francisco and the irrigation districts would fail and with it the congressional coalition needed to pass the legislation. Whatever his motives, Whitman opened an array of constitutional questions that would not be resolved until the Supreme Court, almost three decades later, upheld Congress' plenary power to place conditions on its authorization of the flooding of Hetch Hetchy Valley.

The Committee adjourned until Saturday morning. Before Whitman returned to the witness table, Chairman Ferris read a telegram that he had received from Eugene J. Sullivan, President of the Sierra Blue Lakes Water and Power Co., which stated that there is "absolutely no water shortage here" in San Francisco and alleged that San Francisco officials had deceived the Committee, the Army Board and Mr. Freeman. Sullivan predicted that "[w]e shall have an unfortunate scandal."

Congressman Raker then read a telegram that he had received from John Muir, which asked the Committee to delay the hearings so that the opponents would have an adequate opportunity to present their case. "This fight for and against the people's parks and playgrounds has been going on for years," Muir argued, "and there is nothing new in the famous Hetch Hetchy scheme calling for urgent and unfair speed." Raker also read several resolutions from local business associations and unions, which urged the Committee quickly to pass his bill. These prompted Representative Taylor to ask: "It will be admitted, will it not, that everybody in San Francisco is in favor of the proposition?" Raker replied: "That is not the only point. This is to show that public notice has been had out all over the State."

Congressman Nolan assured the Committee that there was no scandal over Hetch Hetchy, explaining that Sullivan had a personal stake in defeating Raker's bill because he wanted to sell the Sierra Blue Lakes Water and Power Company's Mokelumne River water rights to San Francisco. Ferris, Raker, Long and others then engaged in a lengthy discussion of Blue Lakes and Sullivan's long-standing opposition to the Hetch Hetchy proposal. Several members of the Committee, particularly Congressmen Taylor and Graham, were concerned about Sullivan's allegation of a scandal and refused to accept Long's or Representative Kahn's attempts to discredit Sullivan. The Committee members agreed to extend the hearings and to send a telegram to Sullivan, asking him to appear before the Committee on July 7, 1913, to present any evidence that he

might have to support his allegations. Not a single word was devoted, however, to the question whether the hearings should be delayed to permit Muir or other members of the Sierra Club to travel to Washington to testify.

Following this sideshow, Whitman resumed his testimony. The flooding of Hetch Hetchy Valley, he argued, would remove from the park one of its essential features. He described Yosemite as embracing "some of the roughest country that God ever made. You do get little places here and there where there is grass and water, but the large part of the country is the roughest sort of country, where camping is as impossible as it would be on the top of this table. Camping and the use of this park reduces itself to one thing—the feed for the horses." He identified only three places within Yosemite that were suitable for grazing and thus camping: Yosemite Valley, Tuolumne Meadows and Hetch Hetchy Valley. Whitman argued that preservation of Hetch Hetchy was essential to the integrity of the Yosemite National Park as a whole, because it was the only place in the northwestern part of the park that provided forage for horses and therefore long-term camping. "Now, if you covered that valley with water—and I am not discussing scenery at all, but I am discussing availability—there is no place for people who come into that part of the grounds to stay."

Congressman Nicholas Sinnott of Oregon asked how many people visited that section of the park. Whitman replied: "It is so remote and so ill-provided with means of locomotion that at the present time comparatively few people go in; but if the Government were willing to build a continuous road from Hog Ranch into the valley there is no reason that occurs to me why as many people should not go in there as now go into the Yosemite Valley." Representative La Follette quickly noted the paradox of the preservationists' position: "If this tract of 1900 acres that is going to be flooded was used in the way you suggest and the people should go in there with their horses, it would not last a week for feeding purposes. They would trample the grass down and probably kill it in one season, there would be

so many horses going over a little piece of ground like that."

La Follette's reaction highlighted the preservationists' dilemma. If they pressed for the preservation of Hetch Hetchy as wilderness, they would be rejected as elitists and "nature fakirs." Yet, if they argued, as Whitman had, that the valley should be preserved but opened for greater public use, they presented the congressmen with the unattractive picture of a denuded resource that, in the face of San Francisco's multiple use proposal, may not be worth preserving. Indeed, as Congressman La Follette remarked, "I am looking at the matter from the broad viewpoint of the people. Not one hundredth of 1 percent of the people of the United States will ever go there. On the other hand, if one fiftieth or a hundredth part of the people of the United States, or even California, were to go in there, it would be a vast camp ground instead of a thing of beauty. That change would take place within a year. For that reason, looking at it from a practical viewpoint, I do not believe the people of the United States care very much whether it is kept for a playground or not."

The subject also inspired La Follette to explore the utilitarian calculus:

Now, so far as congressional action upon this matter is concerned, I do not think that we should consider the relatively few people who go in there, assuming that people who did go in there would be those depending on grazing their horses, as against the claims of those who would put this water to beneficial use. If Congress should consider how few people would go in there if they had to depend on grazing their horses on this meadow, I do not think they would give that proposition any serious consideration whatever, but would rather consider the claims of those who would use that water down in that valley to make corn, or the claims of those who would use the water for municipal purposes, if that purpose is so much higher than

the use for the irrigation of farms. It occurs to me that these uses I have indicated are much higher than the use you suggest; that is, to provide pasture for the few head of stock that would be brought in there.

Whitman, shockingly, agreed: "I desire to say that I agree with you and when the time comes that the use of this water is required by people outside for the raising of food products or domestic purposes, that contention should prevail. It might be perfectly wise at some time to take steps which would flood that part of the valley."

This reply is appalling for two reasons. First, it played directly into the hands of San Francisco, which had cunningly put forth the argument that California's growth made it inevitable that Hetch Hetchy Valley would be used as a source of water supply in the near future. Whitman's acquiescence in this argument undermined the preservationists' position because it reduced the benefits of protecting Hetch Hetchy to a short-term proposition. Second, preservation of Hetch Hetchy Valley, but only until demands for water supply increased in San Francisco and the San Joaquin Valley, was not the goal of Muir and the Sierra Club. Their purposes were broad and enduring—to ensure that the national parks are inviolate and to establish that there are places in the United States that are worth preserving for their own sake, regardless of competing economic considerations. With this one brief comment, Whitman turned a battle over enduring principles into a transitory skirmish over relative costs and benefits. Moreover, given the coalition of Bay Area municipalities and San Joaquin Valley irrigation interests supporting Congressman Raker's legislation, this retreat from the high ground on which Muir had waged his opposition would prove to be a tactical disaster. In fact, Congressman Burton French would return to this concession during the House floor debates on the Raker legislation: "So far, then, as Mr. Whitman is concerned—and I believe all lovers of nature must agree

with him—the question is rather one of time and not of principle."

As Whitman's testimony wore on, Representative Church posed several questions that reveal much about the idea of the national parks in the early twentieth century: "Is it not a fact," he asked, "that when the roads are opened into this Hetch Hetchy Valley the meadows and whatever feed is there, will be monopolized by the Army officers who will be installed there and who will have general supervision over the whole thing?" Indeed, "[h]as it not been your experience that in the Yosemite National Park the best meadows, the best feed and the best springs are now monopolized by the Army officials and that those who come in must take a second place, as far as the desirable camping places are concerned?" Whitman demurred that, given the size of Yosemite National Park, approximately 1500 square miles, "I would not say that." Church persisted: "Has it not been your experience, in traveling through the Sierra reserves, that the best and most desirable meadows are monopolized by the various ranchers at the present time and that the people who come in to pass through the country and to see the scenery take the second-class places instead of the first-class places for feed and springs?" In other words, why protect Hetch Hetchy Valley for the people if they will be prevented by the Army and by herds of sheep and cattle from fully enjoying the natural beauty and solitude of the place?

Whitman shifted his testimony to the sanitation and water quality provisions of Congressman Raker's bill. He noted that legislation would make it illegal to dispose of any refuse within 300 feet of the reservoir and would prohibit the washing of clothing and utensils, as well as stock watering, in the reservoir or in any stream within one-mile above the reservoir. Whitman questioned whether these rules would be adequate to protect the quality of the water exported to the Bay Area and wondered what would happen if a case of typhoid fever were traced to the Hetch Hetchy water supply. In answer to his own question, Whitman predicted that "You will have, 5 or 10 years from now, people from San Francisco coming to

Congress and saying that "the science of sanitation has changed, we know more about it. See what is happening on this watershed. We want the same thing that you have given at Bull Run to the city of Portland, Oregon." And what will Congress 10 years from now know about what actuated this committee? And when they look at the provisions of this bill they will find that in case of any change in the regulations the city of San Francisco must filter its water." The cost of such filtration, Whitman asserted, would be \$10.5 million.

If water from the Hetch Hetchy project would have to be filtered in the near future, there was no real difference between it and the seemingly inferior Sacramento River alternative, either in terms of cost or water quality. The Army Board had estimated that the difference in cost between the Sacramento River and Hetch Hetchy sources was about \$13 million and Whitman argued that this cost savings did not justify the invasion of a national park. Moreover, the cost differential between the two alternatives was largely illusory because San Francisco eventually would have to spend \$10 million to filter the Hetch Hetchy supply, just as it would have to treat water diverted from the Sacramento River. "Take that up, and you have a difference of about \$3,000,000, which in an expenditure as large as this is not a very substantial sum."

Congressman La Follette assailed Whitman's premise that, following treatment, there are no significant differences between protected and unprotected sources of water:

Considering that it is supplied to municipalities for drinking purposes, do you think that a system which was supplied by pumping water from a river below several cities, where the sewage and other refuse runs into the river, even though the water is filtered—do you think that such a system should be considered by Congress as on an equality with a system supplied from the high Sierras . . . where the water has not been contaminated in any way?

Whitman replied feebly that "[a]ll I can say is that the experts, the Army engineers, say that it would be equally good water." La Follette responded: "Here in the city of Washington they claim that their filtration plant is one of the best in the country. At the same time the reports show that in certain seasons there is more typhoid fever here than at other seasons; showing that even filtration does not eliminate typhoid fever altogether." In a common sense way, Representative La Follette anticipated developments in water quality management that would not occur for another half century. It is now a consensus principle of water quality engineering that filtration—even tertiary treatment—is not an adequate substitute for protection of water quality at the source of supply. Indeed, the pristine quality of the Hetch Hetchy water supply is one of its distinguishing and most valuable characteristics.

Chairman Ferris cautioned Whitman that he was "consuming the time of the entire committee with this thing" and urged him to "proceed with more haste." Instead, Whitman turned to the power provisions of Congressman Raker's bill, which would allow San Francisco to sell hydroelectricity generated by the project subject to a royalty established by the Secretary of the Interior and grant the city free use of power for municipal purposes. The Army Board had valued this power at \$45 million and Whitman contended that these revenues should go to the United States, rather than to the city. "I said four years ago that there was a 'nigger in this woodpile,'" he swore, "and the San Francisco people denied it." Moreover, the provision of inexpensive hydroelectricity to Bay Area consumers would place them at an unfair competitive advantage. "With free or cheap power to the manufacturer of San Francisco," Whitman asked, "how can the manufacturers in Puget Sound compete, when they are in the grip of a Boston corporation which has all the power in its control?" This argument went nowhere with the progressives on the Committee. As Representative Graham tersely replied, "They can compete by breaking up the Boston monopoly."

Finally, Whitman observed: "A few words in conclusion, gentlemen: You are asked to consider this park as it is at present, with almost nobody using it. Very little attention has been given to what may happen to this park by the year 2000. On the other hand, the city desires to focus your attention to the year 2000 for its water supply. They are getting along and can get along perfectly comfortably for a good many years for their local supply, but it is the year 2000 they want you to look to. If you look to the year 2000 in one way, I pray you to look to it in the other. What will the park be and what will the use of it be to the American public, winter and summer, in the year 2000?"

This was the preservationists' strongest argument. It was easy for the members of the Committee to envision future population and industrial growth in the Bay Area because these developments would simply follow the pattern in eastern and midwestern cities. In contrast, it was almost impossible for the congressmen to imagine either the dramatic increase in the public's use of the national parks or the relative shortage of wilderness and other special places that would occur over the course of the twentieth century. Whitman attempted to shift the debate over the comparative benefits of development versus preservation by focusing on the same date in the future when demands for both water and wilderness would be vastly greater than in 1913. It is a pity that Whitman left this argument to his concluding comments, however, because it was the one hope of leveling the playing field between San Francisco's utilitarian proposition and the preservationists' defense of the *status quo*.

"Now, I have said nothing about nature," Whitman continued. "I have tried to put this thing on a practical ground, which will appeal to the American citizen and do not want to add anything as to nature. But I have a letter here addressed to the chairman of the committee from Robert Underwood Johnson, who was, with Mr. John Muir, the original cause of the establishment of this park and he has put this matter so admirably in his letter that, as a few concluding words, I should like to read it." Johnson's letter is an eloquent testament to the

origins and purposes of the national parks. It included the following thought:

What is at stake is not merely the destruction of a single valley, one of the most wonderful works of the Creator, but a fundamental principle of conservation. Let it be established that these great parks and forests are to be held at the whim or advantage of local interests and sooner or later they must all be given up. One has only to look about him to see the rampant materialism of the day. It can only be overcome by a constant regard for ideas and for the good of the whole country now and hereafter. The very sneers with which this type of argument is received are a proof of the need yet of altruism and imagination in dealing with the subject. The time has not yet come to substitute for our national motto: "let us eat, drink and be merry, for to-morrow we die."

Whitman attempted to conclude on this high moral ground: "I wish there was some way in which this committee could see the Hetch Hetchy Valley itself. Mr. Ballinger and Mr. Fisher both went out and looked at it, and if you should see it for yourselves, I know you would have an entirely different view of it than my poor efforts have been able to give you."

Whitman thanked the Committee, but before he could rise from his seat Chairman Ferris had a few questions. How was it, he wondered, that the Secretary of the Interior, the Secretary of Agriculture, the Director of the Geological Survey, the Director of the Reclamation Service, the Chief Forester, the distinguished conservationist Mr. Pinchot, the Army Board of Engineers and all eleven members of the California congressional delegation could study San Francisco's plans and reach the conclusion that the highest use of the Hetch Hetchy Valley is for domestic water supply. "Do you not really think that it is assuming a good deal of responsibility for a resident of Cambridge, Massachusetts—even for a learned and distinguished lawyer that you are—to set

up your judgment against that array of talent and array of officials and of Representatives in Congress who have gone into the question the same as yourself?" Whitman could respond only that "[s]o far as it is a question of opinion I agree with you; so far as it is a question of fact, I have endeavored to present such considerations of fact as to show that their opinion has not been based upon consideration of the existing facts."

Ferris then went to the heart of the debate: "Do you not think, when . . . the largest number of people who have visited that canyon or valley in any one year is about 269 or something less than 300, it is taking a good deal of responsibility to set up the interests of those people, however sincere and patriotic they may be, against the interests of approximately a million people who need the water for drinking and bathing purposes?" In response, Whitman returned to his most successful themes: "I should have to disagree with you on the assumption of fact. The million people do not need it; they can get it somewhere else. I have not attempted to speak for 269, but for the greater number of people whom I hope will use it by the year 2000."

Finally, Representative Sinnott asked Whitman about the Society for the Preservation of the National Parks. Whitman responded that "[t]he eastern branch has about 200 members scattered through New England and some as far south as Washington. The members of the western branch I am not familiar with." Sinnott then asked, "How many members of the eastern branch have been out there [to Hetch Hetchy]?" Whitman replied, "I could only guess; I should think it might be somewhere in the neighborhood of 25."

It was a fitting end to his testimony. Despite his best efforts, Whitman was unable to persuade the congressmen on either of his clients' most critical positions—that San Francisco had alternative sources of water outside Yosemite National Park and that the plea to preserve Hetch Hetchy Valley represented a significant popular force. The Committee's view of the preservationists as a handful of nature loving elitists at the margins of the political process survived Whitman's testimony.

William Denman

The Committee's opinion of the preservationists was reinforced by the next witness, William Denman, a founding member of the Sierra Club who had twice visited Hetch Hetchy Valley and who ardently supported San Francisco's plans. The purpose of Denman's testimony, which was conducted through a series of questions from City Attorney Long, was to show the members of the Committee the division within the Sierra Club over the Hetch Hetchy question.

Denman explained that he "was one of the organizers of the Sierra Club, one of the charter members, and was rather active in its councils until it took this action in relation to the Hetch Hetchy. At that time I thought the action was taken under circumstances that were not in perfect candor and I have not been very active in the councils of the club since that time." He questioned the validity of the Sierra Club's vote to oppose the Hetch Hetchy project. "I have always felt that the way the vote was taken there—the peculiar way in which the ballot was sent out and worded—did not get a fair expression of opinion, and it occasioned really a split in the club, and although I did not withdraw from its membership I have not been active since then."

City Attorney Long asked his opinion "as to the effect there would be on the beauty of the Hetch Hetchy by the construction of the proposed Hetch Hetchy Dam?" Denman replied: "Of course, my opinion would not be as entirely free and unbiased as that of the gentleman who has preceded me, because I am a San Franciscan, and know by recent and former visits the condition of the water supply there and how urgent it is that we should have this question determined and it may be that my opinion is somewhat colored by the pressure of the exigencies of the city, but I would not yield to this gentleman in my affection for that upper Tuolumne country." Turning to Whitman, he observed that "I have been through it with some of the same people you have been through with. . . . And I agree with you that if this were a scheme to wipe it out from public

use and visitation I would hesitate very strongly before saying anything here that would in any way help that project."

Denman disagreed with Whitman and the Sierra Club, however, that the flooding of Hetch Hetchy would destroy either the beauty of the valley or the public's ability to enjoy nature there. He began by pointing out the current deficiencies of Hetch Hetchy as a recreational destination.

It is low—much lower than the Yosemite. In the months that it is free of mosquitoes, it is very hot and until the last of September or first of October, when very few go into the mountains; it does not fit into the vacation time in California. . . . I have never known if any of my friends who have camped or desired to camp for any extended period in the floor of the Hetch Hetchy Valley. . . . The first time I went into the Hetch Hetchy the mosquitoes were intolerable. They would light upon a man's blue shirt and turn it brown and were as voracious as mosquitoes could be. The second occasion on which I went in there was in late July and the heat was very excessive and no one would stay there any length of time.

Denman then compared Hetch Hetchy unfavorably to Yosemite Valley:

[T]here is not so very much there to make you want to stay. There is a very beautiful fall; there is a high cliff; and there is a meadow that has the loveliness of mountain meadows. But it has not any of the diversity of view of the Yosemite, with its variety of falls and with all its variety of canyon sculpture and you would never have anybody going over to the Yosemite and then going over to the Hetch Hetchy unless he has a long vacation time and then he will go to Hetch Hetchy merely as an

incident of travel through this region of the Tuolumne or beyond there. In other words, I disagree with Mr. Whitman as to the value of this place as a camping ground and playground during the summer season. No one would ever go there who was simply visiting the State and they would see everything in the Yosemite and very much more than they would see in the Hetch Hetchy. It is miniature Yosemite and while it has its loveliness it is, as I say, not an objective [i.e., a destination] in that country. . . . [I]t would be simply an incident on the trail into the higher mountains on beyond, where there are some very beautiful lakes and numberless small mountain meadows.

In contrast, if the Hetch Hetchy Project were constructed, park visitors could "go just as well into those higher regions and very much faster if you have decent roads and all they care to go into the Hetch Hetchy for is to see this cliff and this waterfall and this lake, which will be there in the place of the meadow. . . . They will pass on through there and go on to this higher country and these roads will make available the lovelier portion of this country where the cliffs and little lakes make it a country of extraordinary Alpine beauty." As for Hetch Hetchy Valley itself, San Francisco's water storage project would transform the merely lovely into a unique resource of sublime beauty. The reservoir would not interfere with the waterfalls and therefore would create "something we have not anywhere else in California, that is a great waterfall and wonderful cliff and lake underneath, in which the whole of it would be reproduced [i.e., reflected]."

Denman continued with a dig at the preservationist wing of the Sierra Club: "I know it hurts the feelings of some people to believe that there is anything that has been supplemented by man in making the beauties of nature; for many people the fact that they saw that water there, coupled with the fact that it

ultimately is to reach the city and be used possibly for beneficial purposes, the coupling of those two facts would destroy all the beauty in that neighborhood for them. I do not believe that that is the universal sentiment of the Sierra Club, admitting that that is an aggregation of pure nature lovers. It certainly was not the unanimous sentiment of the men who formed the Sierra Club and I think they were lovers of nature."

Denman's testimony was the perfect counterpoint to Whitman's. Muir and his wing of the Sierra Club did not have a monopoly on aesthetic sensibility; nor was their's the only legitimate definition of beauty and nature. Far from destroying the special features of Hetch Hetchy Valley, a dam and reservoir would simply transform the beauty that God had created into a more diverse beauty procured by man. Nature had provided two extraordinary canyons of steep-walled granite nearly side-by-side. The grander of the two, Yosemite, would be preserved in its natural state. The lesser Hetch Hetchy Valley could be converted to a high mountain lake, not simply because San Francisco's needs required it, but also because there was no overriding public interest in keeping two valleys in close proximity with essentially the same characteristics.

In recollecting his first visit to Hetch Hetchy Valley in 1871, John Muir wrote that "Yosemite is so wonderful that we are apt to regard it as an exceptional creation, the only valley of its kind in the world; but Nature is not so poor as to have only one of anything."²⁸ To Muir, the similarities between Yosemite and Hetch Hetchy were cause for awe and celebration. Little did he suspect that this wonderful natural coincidence would later serve to justify the latter's destruction.

Toward the end of Denman's testimony, Congressman Graham attempted "to see if we can reduce beauty to mathematics." Whitman, startled by the suggestion, interjected that he had "never heard of its being done before." Graham asked Denman: "Suppose you put the beauty of that place as nature has it as 100,

could you give any estimation as to how much, in your judgment, the proposed bill would reduce the percent of beauty?" Denman suggested that the congressman was asking him to compare apples and oranges:

No; in my opinion the fact that you are coupling the great beauty of this country with the utilitarian purpose, so called, would be the creation of power to put these fans within the reach of every woman who has to cook in a hot kitchen in San Francisco. The coupling together of these two at once would add greatly to the beauty of that place from my point of view. If you were to eliminate San Francisco, the usefulness of power for the average fellow in San Francisco and ask me for my preference, I would say that I would go to Hetch Hetchy to see the lake and the waterfall and the cliff where I would not go to see a mere, small edition of the Yosemite.

Congressman Graham pressed on with his quantitative theory:

Take this view of it: Suppose from the natural condition of it, you would put its beauty on the basis of 100 percent and that 500 people per year go to see it, that would be 500 times 100 or 50,000. Suppose on the other hand, that the improvement is put in and you thereby reduce the beauty of [the valley] 80 percent [but] that 50,000 go to see it. That would make a total of 400,000 persons who took in the newer condition. Would not that give a very much better result, even from the beauty standpoint?

Perhaps sensing the wisdom of humoring an ally, Denman agreed, "Of course, granting your presumption, I would have to come to your conclusions." In an effort to beat the

28. John Muir, *Hetch Hetchy Valley*, NATURE WRITINGS 810 (Library of America 1997).

preservationists with the precision of his mathematics, Graham turned to Whitman and asked whether "the proposed improvement would reduce the percent of the beauty more than 20 points?" Rather than attack Graham's calculations as a parody of utilitarian conservation—or, better yet, to use them to discredit the premise that preservation may be weighed in the balance against water supply—Whitman simply replied: "I am not prepared to say as to the question of lake or meadow. I think persons may well differ on that. I do not know; I would like to think about that. I have tried not to raise that question." Graham responded: "There is no beauty unless there is an eye to see it or a mind to conceive it. It would be like the flower in the poem, 'Born to blush unseen, wasting its sweetness on the desert air.'"

During his first encounter with the Yosemite region, Muir wrote of "[d]ivine, enduring, unwastable wealth" and lamented that "the beauty of the lilies falls on angels and men, bears and squirrels, wolves and sheep, birds and bees, but as far as I have seen, man alone and the animals he tames, destroy these gardens."²⁹ Congressman Graham's view of humanity's relationship to nature, reflective of the other Committee members' sentiments, was worlds apart from Muir's. It is no wonder that the preservationists were doomed.

VII. Aftermath

On August 5, 1913, the Committee voted unanimously to recommend Congressman Raker's bill to the House. In its report, the Committee concluded that a "people who undauntedly met the greatest disaster in all the world's history and who rebuilt a devastated city ought to be given sufficient consideration to enable them to select their own water supply and to ease the tax burden which falls most heavily upon those who work for a living. The Hetch Hetchy question is not 'a raid upon the Yosemite'; it is a question solely of providing pure water in ample supply to human beings."

The House floor debates took place from August 29th through September 2nd. The following day, the House voted in favor of Raker's bill by a vote of 183 to 43. The Senate Committee on Public Lands held one day of hearings on September 24, 1913, and voted unanimously to send the legislation to the floor. The preservationists were represented by Edmund Whitman and Robert Underwood Johnson. No one from California attended. The Senate Committee's views were best summarized at the conclusion of the hearings by Senator Key Pittman of Nevada:

I do not believe that we can improve on God's handiwork in the Hetch Hetchy Valley. I do believe that it is our duty to give our children, God's children, throughout the country, who need it, that water. I want to say for myself that I would rather hear the laughing voice of a happy child, relieved of water famine and supplied with pure water, than all the beautiful sounds of nature, which have been described so eloquently here today.

The full Senate debated the legislation for the first six days of December and just before midnight December 6th, approved it by a vote of 43 to 25. President Wilson signed the legislation into law on December 19th. He said at the time:

I have signed this bill because it seemed to serve the pressing public needs of the region concerned better than they could be served in any other way, and yet did not impair the usefulness or materially detract from the beauty of the public domain. The bill was opposed by so many public-spirited men, thoughtful of the interests of the people and of fine conscience in every matter of public concern that I have naturally sought to scrutinize it very closely. I take the liberty of thinking that their fears and objections were

29. John Muir, *My First Summer in the Sierra*, NATURE WRITINGS 200, 207 (Library of America 1997).

not well founded. I believe the bill to be, on the whole, in the public interest, and I am the less uncertain in that judgment because I find it concurred in by men whose best energies have been devoted to conservation and the safeguarding of the people's interests, and many of whom have, besides, had a long experience in the public service which has made them circumspect in forming an opinion upon such matter.

Muir was devastated by the loss. Friends described him as isolated and despondent. From his home in Martinez, Muir wrote to Vernon Kellogg of Palo Alto on December 27th: "As to the loss of the Sierra Park Valley it's hard to bear. The destruction of the charming groves and gardens, the finest in all California, goes to my heart. But in spite of Satan & Co. some sort of compensation must surely come out of this dark damn-dam-damnation."

Muir died the following December on Christmas eve. Although he did not live to see his beloved valley submerged beneath San Francisco's reservoir, he also did not survive long enough to find solace in the midst of defeat.

"Compensation" for the Raker Act did come, however, and the Hetch Hetchy debacle would redefine American environmentalism. Before Hetch Hetchy, the movement to protect the nation's environment and natural resources was dominated by Gifford Pinchot's doctrine of utilitarian conservationism. Indeed, Congress' decision to authorize the use of Hetch Hetchy Valley for San Francisco's water supply was largely based on this philosophy. As the authors of the House Committee Report on the Raker Act observed:

Conserving the natural resources. What does this phrase mean? Does it mean to lock up our forests and power sites and mineral deposits until some future time, for the use of posterity, without regard for the needs of the present generation? Or does it mean to so regulate the development of these resources that they may be put to the greatest beneficial

use, may yield the maximum economic return for all the people of all generations? We incline to the latter view as being that of the Nation's leaders today.

The Hetch Hetchy battle exposed an inherent contradiction in this creed, however, for there are certain resources—such as the scenic wonders of Tuolumne Meadows or the aesthetic majesty of the Yosemite Valley—that simply cannot be "conserved" through multiple use. San Francisco's allies in Congress rejected the suggestion that the upper Tuolumne River watershed should be placed off-limits to protect the city's water supply, and they were notably uncomfortable with the thought that someday a similar dam would be built at the mouth of the Yosemite Valley. Yet, the logic of the Hetch Hetchy decision, coupled with the inexorable pressures of population growth, would dictate that these resources eventually should be exploited as well.

The sponsors of the Raker Act were among the first to recognize this dilemma. Concerned that the national parks had no governing philosophy, and convinced that (Hetch Hetchy notwithstanding) the highest and best use of the parks should be the conservation of their lands and resources, Representatives Raker and Kent introduced a bill to create a national park system. The bill declared that "the fundamental purpose of the said parks . . . is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Congress' enactment of the National Park Service Act in 1916 thus acknowledged that, while the damming of Hetch Hetchy may have been necessary, it should be defined as an exception to the dominant purposes for which the national parks were created.

Over the next two decades, Congress significantly expanded the national park system, adding among others the Rocky Mountain National Park, the Hawaiian Volcanoes, Mount McKinley (now Denali National Park), the Grand Canyon, Acadia, Bryce Canyon and Zion, the

Great Smoky Mountains and Shenandoah, the Grand Tetons and the Everglades. Under the leadership of its first directors, Stephen Mather and Horace Albright, the National Park Service managed its lands in a manner consonant with Muir's vision—for the protection and preservation of the unique features that caused the lands to be set aside in the first place. Although many parks remained open to preexisting activities such as grazing and mining, neither the Park Service nor Congress was willing to authorize new uses that would be inconsistent with the preservationist mandate.

Indeed, the redefinition of the concept of conservation would even penetrate Gifford Pinchot's Forest Service. In the 1920s and 1930s, at the urging of Aldo Leopold and Robert Marshall, the Forest Service began to set aside "primitive areas" within the national forest system. These designations recognized that, even within a land management regime governed by the utilitarian mandate that its resources remain open to extractive and consumptive uses, the "greatest good for the greatest number" did not require that every tree eventually be cut, that every river be dammed, that every inch of land be exploited. Rather, there is value in preserving some areas simply for their own sake. As Congress explained when it codified and expanded the system of primitive areas in the Wilderness Act of 1964, "an expanding population, accompanied by expanding settlement and growing mechanization, [must] not occupy and modify all areas within the United States . . . , leaving no lands designated for preservation and protection in their natural condition." Areas of "primeval character and influence," lands

where "the earth and its community of life are untrammelled by man," Congress declared, shall be preserved and protected as wilderness "for the use and enjoyment of the American people."

Fifty years earlier, as the battle for Hetch Hetchy was about to move to the Congress, John Muir was even more prescient. "Everybody needs beauty as well as bread," he wrote, "places to play in and pray in, where Nature may heal and cheer and give strength to body and soul alike." Hetch Hetchy was lost because Muir and his colleagues in the fledgling preservationist movement were unable to persuade a majority of Congress of this simple fact. Yet, they planted a seed from which blossomed the modern environmental era.

Hetch Hetchy is the rock on which our national park and wilderness systems are founded. The ghost of the valley helped to preserve both Dinosaur National Monument and the Grand Canyon from their own dam damnation, and it haunts the submerged cliffs of Glen Canyon. Hetch Hetchy animates the Wild and Scenic Rivers Act, which in turn commemorates the Tuolumne as one of the nation's protected rivers. The Endangered Species Act, too, was shaped by the lesson that we should not take all of nature for our own uses simply because that is the cheapest or easiest path. And as dams are razed and salmon restored to the Elwha and the Kennebec, and perhaps someday to the Snake, the deep river flowing through Hetch Hetchy Valley must ripple with both lament and anticipation.



Nobody can be in good health if he does not have all the time
fresh air, sunshine and good water.

Flying Hawk, Oglala Sioux Chief

